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**Service Quality in Islamic and Conventional Banks in  
Malaysia: An Explorative and Comparative Analysis**

**By**

**Ros Aniza Mohd Shariff**

A Doctoral Thesis

Submitted in fulfilment of the requirements for the award of

The Degree of Doctor of Philosophy

School of Government and International Affairs

Durham University

2012

## **Dedication**

*To my dearest parents:*

***Haji Mohd Shariff Tawil***

**&**

***Hajjah Fadilah Zakaria***

*For giving all the love, support and encouragement throughout the duration of  
my studies*

*To my beloved husband:*

***Haji Mohd Hilmi Saadan***

*For your sacrifices, support and sharing all the sweet, pain and bitter  
experience throughout the period of my studies*

*To my dearest children:*

***Ahmad Farhan Mohd Hilmi***

***Alya Farhana Mohd Hilmi***

***Amir Fawwaz Mohd Hilmi***

***Afeef Fakhry Mohd Hilmi***

*For never fail to provide me with love and warmth and have helped to lessen  
the pressure of the task of accomplishing this thesis.*

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In the name of Allah, The Most Compassionate, The Most Merciful. Alhamdulillah, all praise be to Allah, the most gracious and the most merciful. May His peace and blessings be upon our beloved Prophet Muhammad *Sallallaahua'laihiwasallam* and upon his family, his companions and all his sincere followers after them. My utmost thanks to Allah for His blessings and for granting me the persistence and the endurance to complete this thesis successfully.

I would like to express my gratitude and heartfelt thanks to my distinguished supervisor, Dr. Mehmet Asutay, for his valuable guidance, intellectual stimulus, assistance, support and encouragement during the course of study and whose precise and precious supervision propelled me towards the completion of this thesis. I would not have completed this thesis if he had not offered such infinite patience, critical commentaries and productive arguments. It was my good fortune to have benefited greatly from his excellent supervision.

It is also my pleasure to dedicate my special thanks and appreciation to my sponsors, International Islamic University Malaysia and the Government of Malaysia for giving all the financial support throughout the duration of my studies. My gratitude also extended to the respondents in Malaysia for their cooperation in answering the questionnaires for this study and everyone who has directly or indirectly contributed to the successful accomplishment of this thesis.

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I offer deepest appreciation and love for a lifetime.

## ***DECLARATION***

*I hereby declare that no portion of the work that appears in this study has  
been used in support of an application of another degree in qualification  
to  
this or any other university or institutions of learning*

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## **ABSTRACT**

### **Service Quality in Islamic and Conventional Banks in Malaysia: An Explorative and Comparative Analysis** **Ros Aniza Bt. Mohd. Shariff**

Islamic banks now operate in competition with other Islamic banks, foreign Islamic banks and also with conventional banks offering banking products and services based on Islamic principles. However, it is known that the intense competition in banking industry results in providing better services to the customers as well as providing competitive products.

The aim of this research, hence, is to explore and examine the perceived level of service quality of Islamic and conventional banks in a comparative manner through the perceptions of the customers in Malaysia. This research also aims to explore and examine the relationship between perceived customer satisfactions and the identified service quality dimensions in Islamic and conventional banks. Furthermore, the study also investigates the customers' level of knowledge and awareness of relevant financial and banking concepts and terms in conventional and Islamic banking in Malaysia with the objective of establishing the sources of patronage and motivation in bank selection. Importantly, the study explores the expectations of the customers on these areas so that a comparison can be made within Islamic and conventional banks and also between these two bank categories to identify service quality gap.

This study utilises a modified SERVQUAL model, which is based on the widely accepted SERVQUAL model and CARTER model to measure the service quality in Malaysian banks. In responding to the aims of this study, a questionnaire survey was utilised with 941 respondents, which was carried out in late 2010 in large cities in Malaysia. In analysing the data, descriptive and inferential statistics analyses were employed. The approach taken by the study in examining the service quality gap is to compare the customers' expectations with their actual perceptions. In addition, the study examined and analysed the customers' satisfaction relationship with the service quality dimensions.

The findings in relation to customers' familiarity with Malaysian banking products and services evidenced that they possessed a higher level of knowledge and awareness of conventional banking services compared to Islamic banking services.

The findings on the factors influencing banking selection criteria revealed that 'religious obligation' was the most important criterion for the Islamic banks' customers, while 'courteous and competent personnel' was identified as the most important criterion for conventional banks' customers. In addition, the findings on the factor analysis showed that for Islamic banks, all of the service quality factors could be grouped into three components: 'service oriented factors', 'financial oriented factors', and 'religious obligation and image factors'. On the other hand, the factors for the conventional banks are re-classified with factor analysis as 'service oriented factors', 'financial oriented factors', and 'marketing oriented factors'.

As for the level of service quality, the main findings produced seven dimensions of service quality: (i) compliance with Islamic values; (ii) assurance; (iii) reliability; (iv) tangible; (v) empathy; (vi) responsiveness; and (vii) social responsibility. For the expectation part, the 'reliability' dimension scored the highest average mean for both categories (Islamic banks and conventional banks) while the lowest average mean score for both type of banks was the 'tangible' dimension. On the other hand, the 'assurance' dimension scored the highest average mean in the perception part of Islamic banks, while 'reliability' dimension scored the highest in the perception analysis related to conventional banks. In contrast, the lowest score of average mean for the perception of Islamic and conventional banks was the 'empathy' dimension.

The results of the study depicts that all of the service quality gap values (perception minus expectation) were negative which showed that the performances were below expectations (obtaining a negative score), which led to a perception of low service quality. Finally, the regression analysis showed that the most important dimension that had positive direct effect on customers' satisfaction is 'tangible' related factors.

The study has significant implications for Malaysian banks in providing a direction for service quality improvement. It is expected that the study can inform the management of the banks in developing their marketing strategy, which is crucial for emerging intense competition in Malaysian banking in general and for Islamic banking in particular. Lastly, while the Islamic banks have been subjected to criticism for having poor service quality, this study shows that there was not much difference on the service quality gap (perception minus expectation) between the Islamic and conventional banks in Malaysia.

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# GLOSSARY

(The Glossary for terminology used in this thesis is taken from Dusuki (2005) and Mohd-Karim (2010) ).

## Transliteration

## Translation

*Al-Quran :* The Holy Book of the Muslims consisting of the revelations made by Allah to the Prophet Muhammad (PBUH). The Quran lays down the fundamentals of the Islamic faith including beliefs and all aspects of the Muslim way of life.

*Al-Hadith :* The tradition or collection of traditions attributed to the Prophet Muhammad (PBUH) that includes his saying, acts, and approval or disapproval of things. Hadith is valued by Muslims as a major source of religious law and moral guidance.

*Bai' al- istisna' :* A contract of sale in which a supplier of the goods or services is asked to supply goods of definite specifications at agreed rates, place and time of delivery. The price of the goods is paid in advance, but the goods are manufactured and delivered at a later date.

*Bai'al-inah (inah):* A sale with immediate repurchase. Literally, it means a contract which involves the sale and buys back transaction of an asset by a seller. The seller will immediately buy back the same asset on a deferred payment basis at a price that is higher than the cash price.

*Bai'al- dayn:* Refers to a sale of debt or receivables.

*Bai' al-salam:* A contract in which advance payment is made for goods to be delivered later. The seller undertakes to supply specific goods to the buyer at a future at a future date in exchange for an advance price fully paid at the time of contract.

<i>Bai' bithaman 'ajil:</i>	This contract refers to the sale of goods on a deferred payment basis. Equipment or goods requested by the clients are bought by the bank which subsequently sells the goods to the client at an agreed price which includes the bank's mark-up (profit). The client may be allowed to settle the payment by instalments within a pre-agreed period, or in a lump sum. Similar to a murābahah contract, but with payment on a deferred basis.
<i>Fiqh / usul al fiqh:</i>	Islamic Jurisprudence / The Principles of Islamic Jurisprudence. It covers all aspects of life – religious, political, social or economics etc.
<i>Gharar:</i>	Literally it means uncertainty, hazard, chance or risk. <i>Gharar</i> is a sophisticated concept that covers certain types of 'haram' uncertainty in a contract. It is an exchange in which one or more parties stand to be deceived through ignorance of an essential element of the exchange.
<i>Halal :</i>	Permissible according to <i>Sharī'ah</i> .
<i>Haram :</i>	Prohibitions according to <i>Sharī'ah</i> .
<i>Hiwalah:</i>	A transfer. An agreement by which debtor is freed from a debt by another party and becomes responsible for it.
<i>Ijarah :</i>	A lease agreement whereby a bank or financier buys an item (like a building, equipments etc) for a customer and then leases it to person over a specific period, thus earning profits for the owner of the asset by earning rental income.
<i>Iwad :</i>	Counter-value.
<i>Kafalah :</i>	A contract of guarantee, security or collateral. It is also defined as the responsibility of the entrepreneur or manager of a

business, that is, one of two basic relationships towards property, which entails bearing the risk of its loss.

<i>Muamalah:</i>	It is an Arabic term means business or commerce.
<i>Mudhārabah:</i>	An agreement made between two parties: one which provides 100 percent of the capital for the project and another party known as a <i>mudarib</i> , who manages the project using his entrepreneurial skills. Profits are distributed according to a predetermined ratio. Any losses accruing are borne by the provider of capital. The provider of capital has no control over the management of the project.
<i>Mudarib:</i>	Refers to the partner who provides entrepreneurship and management in a <i>mudharabah</i> agreement.
<i>Murābahah:</i>	A contract sale between the bank and its client for the sale of goods at a price which includes a profit margin agree by both parties. As a financing technique, it involves the purchase of goods by the bank as requested by the client. The goods are sold to the client with a mark-up. Repayment, usually in instalments is specified in the contract.
<i>Mushārahah:</i>	A partnership contract between two parties who both contribute capital towards the financing of a project. Both parties share profits on a pre-agreed ratio, but losses are shared on the basis of equity participation. Either parties or just one of them may carry out management of the project. This is a very flexible partnership arrangement where the sharing of the profits and management can be negotiated and pre-agreed by all parties.
<i>Qard-al Hasan:</i>	An interest-free loan given mainly for welfare purposes. The borrower is only requires to pay back the amount borrowed. In some cases, a minimum administrative fee may also be charged to the borrower.

<i>Rab-al-Mal :</i>	The owner of capital in a <i>mudharabah</i> contract. The owner agrees with the working party to give him an amount of money to be invested such that the profit is distributed among them with known predetermined percentages that are not based on the capital but on the amount of the realized profit itself. As for the loss (if any), is to be borne by the owner of capital alone and the working party suffers the loss of his effort and his time without any compensation.
<i>Rahnu:</i>	A pledge or collateral.
<i>Riba':</i>	Literally means an increase or addition. Technically it denotes any increase or advantage obtained and accrued by the lender in a loan transaction without giving an equivalent counter-value or recompense in return to the borrower. In a commodity exchange it denotes any disparity in the quantity or time of delivery.
<i>Sarf:</i>	Refers to currency exchange.
<i>Shari'ah:</i>	In legal terminology, <i>Shari'ah</i> means the law as extracted by the <i>Mujtahids</i> from the sources of law. The term <i>Shari'ah</i> can also mean divine guidance as given by the Quran and the <i>Sunnah</i> of the Prophet Muhammad (PBUH) and embodies all aspects of the Islamic faith, including beliefs and practice.
<i>Sukuk :</i>	An Islamic bond. It is defined as an asset-backed certificate which is structured in accordance with the <i>Shari'ah</i> and may be traded in the market. A <i>sukuk</i> represents the proportionate beneficial ownership in the underlying asset, which can be leased to a client to yield the return on the <i>sukuk</i> .

<i>Sunnah :</i>	It refers essentially to the Prophet's examples as indicated by his practice of the faith. Literally means custom; the habits and religious practices of the Prophet Muhammad, which were recorded for posterity by his companions and family and are regarded as the ideal Islamic norm.
<i>Tabarru' :</i>	A <i>takaful</i> donation or a contract where a participant agrees to donate a pre-determined percentage of his contribution (to a <i>takaful</i> fund) to provide assistance to fellow participants.
<i>Takaful :</i>	Literally it means guaranteeing each other. It is a system of Islamic insurance based on the principle of <i>taa'wun</i> (mutual assistance) and <i>tabarru'</i> (voluntarily) where risk is shared collectively by the group voluntarily.
<i>Tawarruq :</i>	It is the method of how an Islamic bank is facilitating the demand/supply of cash from/to its customers. The bank's customers ( <i>mutawarriq</i> ) will buy a commodity on deferred payment basis from the bank and sells the commodity for a cash amount less than the deferred price to a third party (authorised commodity trader). The <i>tawarruq</i> contract also being use in a deposits product where the bank guarantee a predetermined percentage rate of return to its term-depositor.
<i>Ujr:</i>	A compensation or service charge, or contract of agency in which one person appoints someone else to perform a certain task on his or her behalf, against a certain fee.
<i>Wakalah:</i>	Delegation of a duty to another party or agency for specific purposes and under specific conditions. Under this concept, the bank acts as the customers' agent in completing a particular financial transaction. As an agent, the bank will be paid a certain amount of fee for the services it provides.
<i>Wadiah:</i>	Custody or safekeeping or deposit account.



# Chapter 1

## Introduction

### 1.1 INTRODUCTION

Service quality has gained a significant attention from academicians and practitioners during the past few decades. Many scholars (Grönroos, 1984; Berry *et al.*, 1985; Parasuraman *et al.*, 1988; Zeithaml *et al.*, 1990; Cronin and Taylor, 1992; Ghobadian *et al.*, 1994; Liljander and Strandvik, 1995; Othman and Owen, 2002) have studied the concept, design and measurement of service quality. In addition, several issues related to service quality, such as customer satisfaction, relationship between service quality and profitability, features of service quality and service quality gap also have been developed conceptually but also empirically tested.

Accordingly, service quality has many definitions, dimensions, and techniques, which may affect its construction, distribution, utilisation, and researchers have continued to study a variety of quality dimensions in the service context. Early researchers have tried to define quality in the service sector on the basis of tangible elements of products, such as technical specifications and physical appearance. Quality is, therefore, often defined as “conformance to specifications” (Berry *et al.*, 1988: 35). However, a conformance-to-specifications definition of quality may be unsuitable for services, particularly when a high degree of human contact is concerned (Reeves and Bednar, 1994: 431). In addition, by taking into account the end users, service quality is also defined as “a perceived judgment, resulting from an evaluation process where customers compare their expectation with the service they have received” (Grönroos, 1984: 38). Furthermore, by referring to expectations, service quality is defined as “the difference between expectations and performance of the service” (Parasuraman *et al.*, 1985:42), implying that different customers place different value on the attributes of services they received.

In the literature, several researchers have emphasised the significance of managing service quality; a business could thus distinguish its service offerings by delivering a better service quality than its competitors. This would give the company competitive advantages leading to more sales and profits by encouraging current customers to

repeat or extend purchases in order to achieve long-term success. As such, the process of managing service quality starts with understanding customers' expectations, because service quality is a perception related concept. This means that companies need to measure how they offer a quality service that meets and even exceeds customers' expectations. Furthermore, the main perspective within service quality is that it has a positive relationship with satisfaction, and leads to repeat purchase or repeat use of service and strengthen loyalty (Storbacka *et al.*, 1994: 21).

Concurrently, service quality issues have also flourished in the area of Islamic banking, which is relatively a very young industry (Shariff and Al-Adwani, 2012:4). The emergence of service quality management requires an examination and reflection from an Islamic perspective. The rapid growth of Islamic banking and finance and its global reach, which includes the Western and developed markets, necessitates to examine the demand and supply conditions beyond the religiosity factor as a determining factor for bank selection. With the increase in product selection, significant growths have been seen in new Islamic banks, as well as Islamic windows within the conventional global financial institutions (Amiri, 2008:17), increasing competition makes service quality an important factor in aiming to reach the competitive advantageous position for individual Islamic banks. In line with the demand for services and products, requirement has also grown for information about service quality and performance in Islamic banking sector.

Service quality, thus, is becoming more essential for Islamic banks to maintain their market shares. It is estimated that around 500 Islamic banks are in existence and operating in 75 countries, with an expected average annual growth of around 15% to 20% (The Banker, 2011). Although Islamic banking and finance sector have been growing rapidly over the last few decades, there remain a number of obstacles to overcome in order to sustain their trust, integrity and fairness. In other words, it is true that the industry has demonstrated an amazing creativity to adapt ancient principles to suit modern markets, there is still plenty of room for improvement (Klein, 2008:35).

Although the world is engulfed in the current economic turmoil in the current time, Islamic banking and finance has managed to continue to flourish in different parts of the world. However, the question remains whether its service quality meet the requirements of up-to-the-minutes customers, as customers are more responsive to

latest innovations (Kamal, 2008:46). They search and demand for a comprehensive products or services that fit comfortably to their financial and lifestyle needs, and most importantly, one which is highly feasible with conventional offering (Amiri, 2008:18). Hence, to live up to their expectations and to address their demand, industries like Islamic banking have no alternatives but to be equipped with the current knowledge and strategies of service quality management to enhance their resilience and maintain their stability.

In addition, the improvement of the service quality will retain Islamic banking competitiveness and attractiveness. In this era of intense competition, Islamic banks have to realise that quality has become the key strategic value in every sector. Thus, to survive, Islamic banks need to reconsider current and future strategies in terms of quality of services as well as their financial positioning. In considering that competition in domestic and foreign markets has become a reality for Islamic banks as well, service quality can provide the competitive edge for Islamic banks to develop their business. This study, thus, aims at exploring and examining customer perceptions on the quality of the services offered by Malaysian Islamic and conventional banks in a comparative manner.

## **1.2 RESEARCH BACKGROUND AND MOTIVATION**

The experience of American banks in the 1970s and 1980s due to a fierce competition among them had taught an important lesson: improved services to customers will save cost in the long-term despite the short-term cost of higher spending on training and rehabilitation (Saleem, 2005). The improved services create a climate, which is conducive both for clients and employees for the conventional banks. It increases clients' enthusiasm to deal with the bank on one hand, and raises the productivity of the employees on the other (Lewis *et al.*, 1994: 3; Saleem, 2005).

According to Saleem (2005), Islamic banks pay little attention to their quality of services they offer, especially if they enjoy a position where they can exercise some monopolistic control in the market, which most of the time is based on religious legitimacy. Nowadays, however, the monopolistic position is deteriorating, because of the multiplicity of Islamic banks in many countries and the entry of conventional banks into the Islamic finance market (Saleem, 2005). In this regard, the ability of Islamic banking industry to secure a greater market share in a rapidly evolving and

demanding financial environment is dependent on the strategic positioning of the Islamic banking players to maintain their competitive edge and offer services that satisfy customers' needs (Dusuki and Abdullah, 2007:143).

Even though Islamic banking may be concerned with a very different set of banking aims and objectives in comparison to conventional banks, the issues of service quality are of common interest, and there is much that Islamic banking institutions can learn from the Western banking service quality experiences. Currently, the prospective roles of Islamic banking in transforming their marketing strategy towards a better practice of service quality for their institutions have not been sufficiently scrutinised.

It is also important to note that service quality and its aspects can be located within the Islamic discourse as an essential part of Islamic moral economy axioms, which by definition imply that whatever human beings do, it should be for 'human well-being' and for the 'betterment of human well-being' (Asutay, 2010). Thus, in particular for Islamic banks delivering quality service is not only a 'financial option', but also a divine requirement by definition of their existence.

There is, hence, a crucial need to conduct a number of studies to strengthen the concepts relating to the quality of service in Islamic banking. This study, hence, focuses on certain issues relevant to service quality management, which has generated much attention in the marketing literature (Fisk and Grove, 1995; Liljander and Strandvik, 1995; Rafiq and Ahmed, 1995).

In an attempt to understand the phenomenon better, various models of service quality have been discussed and several methods of measuring service quality have been developed. The best-known tool for measuring service quality is the SERVQUAL scale developed by Parasuraman *et al.* (1985), where quality is described as the difference between what a service company should offer and what it actually offers (Liljander and Strandvik, 1995). Furthermore, CARTER model, which was developed by Othman and Owen (2002) is considered as the most common model used for Islamic banks.

The factor behind service quality's increasing eminence is that delivering excellent quality proves to be a successful competitive technique (Zeithaml *et al.*, 1990). In the service economy, leading companies are enthusiastic about service excellence.

Banking industry also use service quality strategy to be distinctive; increase efficiency; seek some protection from price competition and encourage positive word-of-mouth advertising. In addition, these companies also use service to secure customers' loyalty (Zeithaml *et al.*, 1990).

Nevertheless, customers of Islamic banks are no longer solely looking at compliance of *Shari'ah* (Amiri, 2008:18) or the religious loyalty. Their confidence in subscribing to Islamic financial products do not simply come from the products being Islamic, but also in their overall positive performance and the quality of service provided by Islamic banks. Clearly a bank can offer improved services to all clients by offering an effective banking practices through individual banking services tailored to every clients' needs and raise the professionalism level of employees when dealing directly with them in order to offer efficient services that result in gaining client's confidence.

This study, hence, is motivated by the fact that service quality of Islamic banking sector should also be examined to identify the customer satisfaction and the importance given by the customers for quality dimensions. In order to determine the service quality performance of Islamic banks, Malaysian conventional banks are also examined in relation to their service quality in a comparative manner. Through studying the identified aim, this study, hence fills an important gap in the literature.

### **1.3 RESEARCH AIM AND OBJECTIVES**

The research, hence, aims to explore and analyse service quality in a comparative manner in Islamic and conventional banking in Malaysia through expectation and perception analysis. Moreover, by measuring the expectation and perception of customers at both bank types, this study aims to identify 'service quality gap'. Furthermore, this study also aims to measure the determinants of customer satisfaction through service quality dimension. Moreover, a reference to the relationship between the perceived service quality and financial performance of the individual banks is made.

The following research objectives are developed in fulfilling the aims of the study:

- (i) to discuss the service quality and to justify theoretically why service quality is pertinent to Islamic and conventional banking sector in Malaysia;

- (ii) to explore the opinion of the customers of Islamic banks in Malaysia in relation to service quality in both expectation and perception level through a questionnaire survey;
- (iii) to test the SERVQUAL and CARTER model with the primary data collected through a questionnaire survey from Malaysian Islamic and conventional banking;
- (iv) to gauge the customer satisfaction in both the bank types; and identify the determining factors of customer satisfaction;
- (v) to measure the service quality gap both in Islamic and conventional banks;
- (vi) to correlate the financial performance of the Islamic and conventional banks with the customers' perceived service quality;
- (vii) to correlate the horizontal diffusion of banks in the form of branch numbers with the service quality scores.

In order to achieve these objectives, the following techniques will be adopted:

- (i) to collect primary data through a questionnaire survey;
- (ii) to undertake empirical analysis to test the validity of the identified models;
- (iii) to perform a modest financial and diffusion analysis to correlate with the outcome of the service quality scores.

## **1.4 RESEARCH QUESTIONS**

Within the identified research aim and objectives, the following research questions are established:

- (i) Why is service quality relevant to Islamic and conventional banks in Malaysia?
- (ii) Are there any differences in terms of the customers' level of knowledge and awareness concerning the banking products and services offered by Islamic and conventional banks in Malaysia?

- (iii) What are the factors determine bank selection in Malaysian Islamic or conventional banks?
- (iv) What is the perceived service quality of the Malaysian customers towards the service quality of Islamic and conventional banks in Malaysia?
- (v) Are there any relationship between the service quality dimensions and customers' satisfaction?
- (vi) Are there any correlation between the service quality of Islamic and conventional banks and their financial performance?
- (vii) Is there any relationship between the service quality of Islamic and conventional banks and the horizontal diffusion of these banks?

The service quality issues in Islamic and conventional banks in the first research question deals with the conceptual aspect of the study. The next six research questions, on the other hand, relate to the empirical analysis on the level of customers' knowledge and awareness of banking products, patronage factor, respondents' expectation and perception on service quality of Islamic and conventional banks, customers' satisfaction, correlation of the customers' perceived service quality with the banks' financial performance, and correlation of the customers' perceived service quality with the horizontal diffusion of these banks.

## **1.5 SCOPE OF THE STUDY**

This study explores service quality management of Islamic and conventional banks in Malaysia and offer plausible explanation for answering the research questions outlined in the previous section based on a comprehensive analysis and synthesis of literature of service quality. Moreover, the theoretical discussion helps to shed light on the trend of service quality as widely practiced in the West. In order to examine the extent of significance of the service quality management for Islamic and conventional banking in Malaysia, the study includes empirical analysis of expectations and perceptions of service quality among customers' of these banks.

Other topics pertaining to Islamic banks, such as product development, *Shari'ah* Advisory Board and community obligation will not be a focus of this study due to the

constraints of the time and cost. Instead, the study attempts to examine the service quality management of Islamic and conventional banks in Malaysia in general through an empirical analysis based on primary and secondary data.

## **1.6 THE RATIONALE AND SIGNIFICANCE OF THE STUDY**

A distinctive contribution of this study to the field is the examination of the service quality management in Islamic and conventional banks in Malaysia and the customers' perceived attitude towards it. Numerous theoretical and empirical studies have investigated the phenomenon of service quality in the West (Zeithaml *et al.*, 1990; Fisk and Grove, 1995; Liljander and Strandvik, 1995). However, past research investigating the expectations, perceptions and attitudes toward service quality in Islamic banks remain embryonic. This study, hence, aims to fill the observed gap in the literature by further comparing the service quality of Islamic and conventional banks in Malaysia.

Furthermore, there is a crucial need to conduct research on the perception of Islamic banks' customers towards the quality of the service offered by them to crystallize the theory of service quality. With the increase in Muslim populations and the consciousness of Islamic values, there is a greater request for Islamic banks, which are the agents through which the objectives of the Islamic financial system can be realised, as these institutions have a different ways in conducting their business operations in comparison to conventional banks.

As well known, Islamic banks are founded on religiously established framework of contracts and operations; and they have a set of distinguished products in the financial market. Unlike conventional banks where interest is an important part of their business, Islamic banks are created to avoid interest in all financial transactions. In this regard, as one of the market players in the banking sector, there is a demand for information on Islamic banks' service quality management.

The assessment of Islamic banks' service quality is essential for all parties. In an aggressive and competitive financial market, their service quality and performance will be the imperative indicator used by depositors, investors, bank managers and regulators. This study endeavors to give an indication of the level of service quality in



Islamic and conventional banking which is essential for various stakeholders (Samad and Hassan, 1999).

Although a few studies have been conducted to measure service quality in Islamic banks in the Middle East; such as Metawa and Al-Mossawi (1998), Othman and Owen (2002), Al-Zaabi (2006), and Al-Adwani (2010), no serious attempts have been made to examine the expectations and perceptions of customers towards the service quality of Islamic banks in Asian countries, especially in Malaysia. Thus, this study attempts to fill this observed gap in the existing body of knowledge by providing insights into service quality management and customers' perception of service quality of Islamic and conventional banks in Malaysia.

Since almost all of the literature on service quality argue that service quality is an essential strategy for any institutions to survive and have competitive advantage, this study adds knowledge on what are the perceived service quality on Islamic and conventional banks in Malaysia, which service quality dimensions have relationship with customers satisfaction, and whether there are any correlation between the perceived service quality and the banks' financial performance.

This study, thus, provides valuable contribution on the perceived service quality level of Islamic banks in comparison to the conventional banks in Malaysia. Considering that most of the empirical studies on Malaysian Islamic banking have concentrated on the Islamic financial products, banking regulations, and operational side of Bank Islam Malaysia Berhad (BIMB) (Samad and Hassan, 1999; Rosly and Bakar, 2003; Satkunasingam and Shanmugam, 2004), they disregarded the marketing strategy, but also most of these studies are confined to only a single bank. It is, therefore, critical to examine how other new Islamic banks in Malaysia have performed in terms of their service quality and also how they have performed in relation to other conventional banks.

It is important to note that this study provides a larger sample size within the broader populations in the Islamic and conventional banking industry, and incorporates numerous local-owned and foreign-owned Islamic and conventional banks as well as stand-alone Islamic banks and Islamic subsidiaries. The analysis of the sample size and population is possibly the first of its type in any empirical study accomplished in the Malaysian context that explores respondents' expectation and perceptions of the

service quality of Malaysian banks. Furthermore, the study correlates the financial performance of these banks with their service quality performance. This research also extends to examine the potential relationship between horizontal diffusion of banks as represented by their branch size and their service quality performance. It is expected that if a bank has many branches, it implies that it is perceived well by the customers in terms of its service offering.

In addition, the banks' financial performance has impact on the customers' and stakeholders' satisfaction towards the Islamic and conventional banks in Malaysia. It also affects customers' retention and choice of banks that they are more likely to bank with. The recent performance of these banks will shape their future direction, as the direction taken (whether to focus more on growth or profitability) will significantly influence their future. It is also important to note that service quality can be essential factor in customer retention and new customer take up. Thus, the direction of causality can run in both ways in particular considering the importance attached to service in a highly competitive environment.

Nonetheless, the present study departs from the past studies in two ways. Firstly, the study aims to bridge some gaps in both the service quality as well as the Islamic banking literature by conducting empirical surveys on expectations and perceptions of service quality management of Islamic and conventional banking in Malaysia. By adopting this approach, this study will be of potential relevance to these banks particularly in developing their marketing strategy. By having superior service quality, efficiency and higher profit for Islamic banks can be achieved.

Secondly, this study also adopts various dimensions of the original SERVQUAL and CARTER model and other relevant dimensions that suit the nature of Islamic and conventional banks in Malaysia, in measuring the perceived level of their service quality. Moreover, a study that investigates customers' opinion of service quality management from an expanding economy like Malaysia, country which aims to be a leader in the development of Islamic banking and finance in the world, will definitely add an extra features to the literature.

Customer satisfaction is another area that this study enquires through the collected data, through which this study provides valuable understanding the factors determining customer satisfaction in both Islamic and conventional banks. Lastly, an

important contribution of this study stems from its attempt to measure the service quality gap in both the Islamic and conventional banks.

In addition, this study attempts to propose avenues for Islamic banks in order to be sustainable institutions in the future, since superior service quality will help to retain customers' loyalty. The study should also be able to offer contribution to the current debate of the Islamic financial institutions, and be the means to minimise the information gap between Islamic banks in Malaysia with the investors or customers and the regulators.

As can be seen, this study contributes to the literature through a number of ways and areas, and hence fills the existing gap in the body of knowledge.

## **1.7 RESEARCH METHODOLOGY**

In responding to the described research questions, this research is framed within qualitative research methodology, as it benefits from perceptions and opinions of the participants collected through a questionnaire schedule.

As regards to research methods, this study undertakes a combination of two research methods: descriptive and quantitative. Firstly, an extensive review of the existing literature of service quality in conventional and Islamic banking, and secondly, an empirical study to elicit the respondents' expectations and perceptions in responding to the service quality in Islamic and conventional banks in Malaysia. In addition, empirically exploring the expectations and the perceptions of the customers of Islamic and conventional banks in Malaysia, the research utilises a triangulation of primary and secondary data.

The study begins with a review of the existing theories and studies that are related to service quality in banking. The study also conducts a comparative study of the differences between service quality of conventional banks and Islamic banks, including the definitions, characteristics, designs and dimensions in service quality.

Furthermore, this research mainly conducts an empirical case study as the research design to investigate and compare the perceived service quality level of Islamic banks with conventional banks. The comparison also includes the analysis of the difference between the perceived and expected service quality.

In collecting primary data, two sets of questionnaires are employed as the research tools, namely expectation measurement and perception measurement oriented questionnaires. The respondents comprises of samples from customers of the Islamic and conventional banks in Malaysia. It should be stated that the survey successfully collected 941 completed and usable questionnaires.

Lastly, in order to correlate the financial performance of Islamic and conventional banks with their service quality, document analysis is used to analyse the institutions' annual reports to prepare for the ratio analysis.

In analysing the collected data through questionnaire and annual reports, statistical methods were employed including descriptive and inferential statistical analysis as well as regression analysis.

## **1.8 STRUCTURE OF THE RESEARCH**

The present chapter introduces the main themes of the study and highlights its underlying motivations, objectives, research questions, scope of the study and significance. Following this brief introductory chapter, the research presented in this thesis is organised as follows:

Chapter 2 (*Service Management in Banking: Survey of the Literature and Empirical Studies*) reviews the existing literature, which discusses the service quality models and measurement. It also defines service quality and discusses the concepts and designs of service quality, the features of service quality, and the service quality gaps. In addition, the chapter presents an overview of customers' perception of service quality. Furthermore, related issues such as service quality and customers' satisfaction as well as service quality and profitability are highlighted in this chapter. Finally, this chapter reviews the empirical studies related to service quality in conventional banking.

Chapter 3 (*Principles of Islamic Finance and Measuring Service Quality in Islamic Banking: A Literature Survey*) highlights the Islamic perspective on service quality, which also discusses in detail the development of Islamic banking. This chapter then elaborates on the issues related to measuring service quality in Islamic banks, including the dimensions and models of service quality in Islamic banks. Finally, the

empirical studies that are related to service quality of Islamic banks are also discussed in this chapter.

In order to contextualise the study, Chapter 4 (*Islamic Banking in Malaysia*) offers a discussion about the scholarly literature on Islamic banking in Malaysia concerning the level of awareness, knowledge, perceptions, and attitudes of the respondents towards Islamic banks and their banking products. The chapter commences with the development of Islamic banking in Malaysia, before highlighting the issues related to Islamic banks. In addition, this chapter covers a wide range of issues such as the general awareness on Islamic banking products and services and banking selection criteria. The chapter also reviews the research methods that were employed in the past by other researchers; this range from empirical studies using primary data such as survey technique to the analysis of secondary data.

Chapter 5 (*Research Methodology and Modelling*) discusses the research design and methodology employed for the data collection process. The chapter starts with elaborating the variables used in this study and the refined research hypothesis which is to be tested in the analysis chapter. In addition, this chapter explains in detail the research process and design, instrument development, sampling procedure and the analytical techniques used in the analysis. The study also presents the explanation and rationalisation for each of the tools used. Data validity and reliability are also discussed in this chapter. This is then followed by Chapter 6, 7 and 8, which present the findings.

Chapter 6 (*Exploring the Customers' Expectations and Perceptions of Bank's Service Quality: A Descriptive Analysis*) provides a descriptive analysis of the results for each of the variables included in the questionnaires. Furthermore, it consists of a socio-demographic profile analysis of the respondents. In addition, the objective of this chapter is to create a foundation for the research based on the analysis of the survey findings. Conclusively, the descriptive analysis, including frequency percentage, mean, and standard deviations value for each of the variables, offers the readers with the fundamental information of the whole findings.

Chapter 7 (*Exploring the Customers' Expectations and Perception of Bank's Service Quality: An Inferential Statistical Analysis*) performs further analysis on the knowledge and awareness on the banking products and services offered by the Islamic

and conventional banks in Malaysia, as well as the patronage factors of these banks. This chapter forms the core of this study. In addition, an extended analysis was conducted on the respondents' expectations and perceptions concerning service quality of Islamic and conventional banks in Malaysia using inferential statistical techniques. Consequently, the main variables in this study were further analysed using statistical tools such as Mann-Whitney U-test, Kruskal-Wallis test, Factor analysis and Wilcoxon Signed Ranks test. The results of the analysis are deliberated and explained in great details with the aim of responding to research questions 2, 3, and 4.

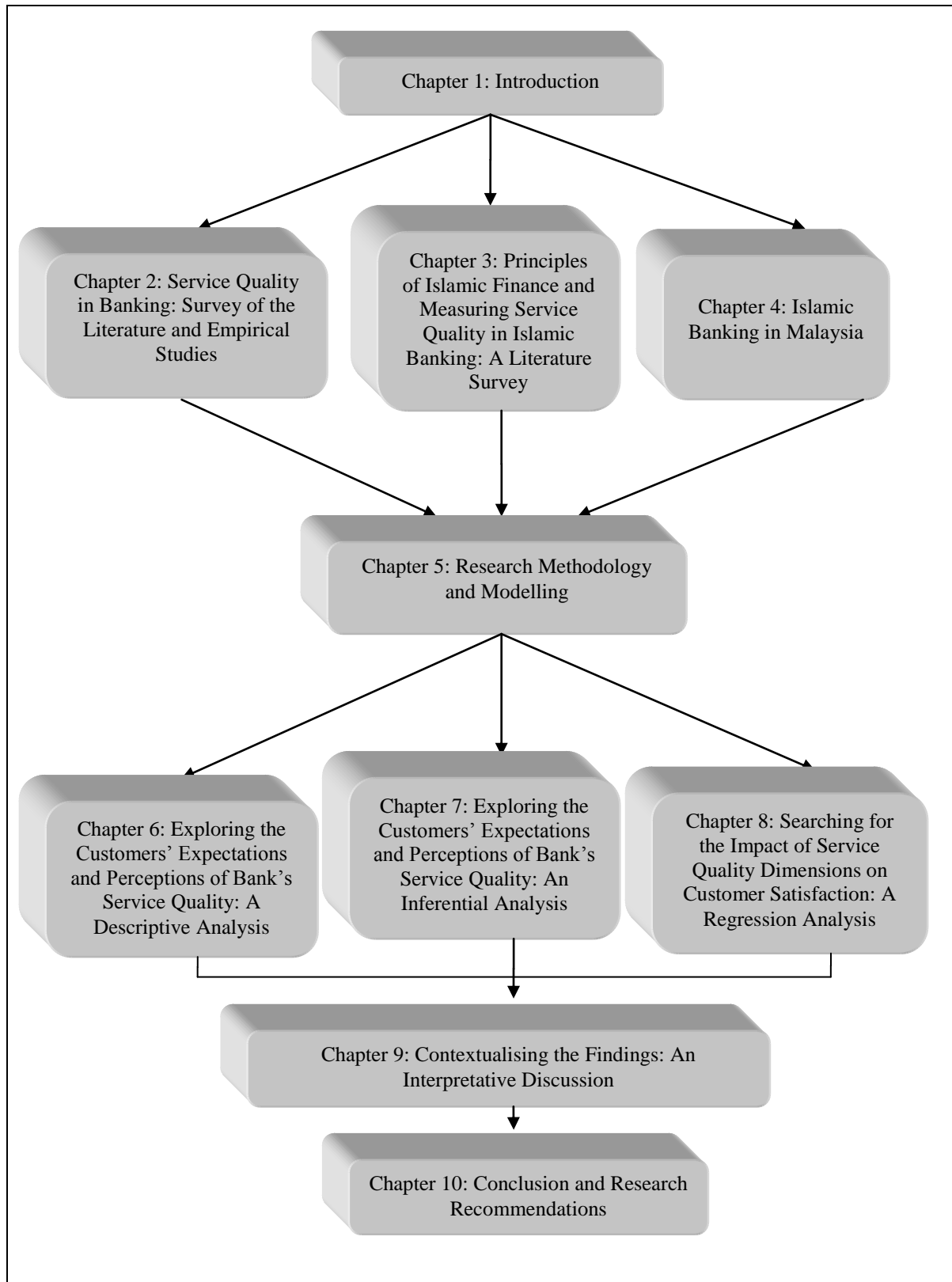
Chapter 8 (*Searching for the Impact of Service Quality Dimensions on Customer Satisfaction: A Regression Analysis*) presents the results of analyses concerning the customers' satisfaction. Additionally, their satisfaction is measured or predicted by explaining customer satisfaction relationship with the service quality dimensions. For this purpose, a different inferential statistical tool was needed in order to analyse, describe, and rationalise the possible justifications for each of the analysis' outcomes. Hence, Stepwise Multiple Regression analysis was utilised. Accordingly, the results in this chapter respond to research questions number 5.

Chapter 9 (*Contextualising the Findings: An Interpretative Discussion*) presents the overall discussion of the findings in chapters 6, 7 and 8 by responding to each of the research hypotheses which have been presented in Chapter 5. In other words, Chapter 9 provides an in-depth and integrative discussion of each of the hypotheses and integrates all the results of the analysis, both from the conceptual and empirical aspects, and contextualises some of the important findings within the present literature of service quality and Islamic banking and finance. The findings in this chapter, hence, offer possible explanation for arriving at inclusive conclusions for the research.

Chapter 10 (*Conclusion and Research Recommendations*) presents a summary of the study's major findings, highlights the study's key implications, presents relevant recommendations, discusses the research's limitations, and offers suggestions for future research.

In summary, Figure 1.1 provides an overall summary of the structure of the thesis, which offers a visual dimension to the structure of this research.

**Figure 1.1: Contents and Structure of the Research**



## **Chapter 2**

### **Service Management in Banking: Survey of the Literature and Empirical Studies**

#### **2.1 INTRODUCTION**

The market competition is intense in today's business environment. Thus, in this era of global competitive market-place, quality has become the key motto in every organisation as they strive for a competitive advantage. In fact, service quality has turn into the great differentiator, the most effective weapon most service organisations acquires (Berry *et al.*, 1988:35). Delivering superior service quality appears to be a prerequisite for achievement and success, if not survival, of such business (Parasuraman *et al.*, 1988:40). Because of the labour concentration of many services, quality can vary considerably from one organisation to another and from one situation to the next within the same organisation (Berry *et al.*, 1985:44). Organisations have been making significant efforts to enhance the quality of their products or services and have adopted a more specialised technique to address a variety of different knowledgeable customers. The customers are more demanding about quality now than in prior years (Berry *et al.*, 1985:44). Their demands are evermore growing as they insist on improved quality of products and services, but are prepared to pay less for their requirements (Dale, 1999:352).

This implies that organisations need to be completely committed in order to satisfy the customers; otherwise, they will be defeated by the competitors. Most customers rely on the quality factor prior to making their choice of products or services. Thus, many successful companies advertise their products or services based on quality rather than price.

This chapter presents a review of service quality models and measurement that becomes a more effective strategy in promoting loyalty and customers' retention and increasing profitability. The chapter is divided into nine sections. Following the introduction in Section 2.1 is Section 2.2 that will define quality. The concepts and design of service quality are discussed in Section 2.3, while Section 2.4 focused on



the features of service quality and service quality gap. Section 2.5 discusses customers' perception of service quality, while dimensions and models of service quality will be discussed in Section 2.6. In Section 2.7, related issues such as service quality and customers' satisfaction, service quality and profitability will be highlighted. Section 2.8 contains empirical results related to service quality. The summary of this chapter will be presented in Section 2.9.

## **2.2 DEFINITIONS OF QUALITY**

The search for a common definition of quality has produced inconsistent results. Such a universal definition does not exist; rather, different definitions of quality are suitable under different situations (Reeves and Bednar, 1994:419). Accordingly, quality has been continuously emphasised for decades because of its significance as a competitive edge in the business industry and it continues to be a topic of influential interest.

According to a Japanese philosophy, quality is “zero defects”, in other words, doing it right the first time (Parasuraman *et al.*, 1985:41). Quality is often defined as “conformance to specifications” (Berry *et al.*, 1988:35). A company can observe improvement in reaching its quality goals by measuring how well it conforms to the established specifications. Nevertheless, a conformance-to-specifications definition of quality may be inappropriate for services, especially when a high degree of human contact is concerned (Reeves and Bednar, 1994:431). In addition, Berry *et al.* (1988:35) argue that this phrase can be misleading in terms of its failure to address the unique characteristics of services. As a result, they define quality as “conformance to customer specifications; it is the customer's definition of quality, not management's that counts”.

The conceptual definition of service quality developed by Parasuraman *et al.* (1985) has been largely employed (Kassim and Bojei, 2002: 845). Service quality has also been referred to as “the difference between expectations and performance of the service” (Parasuraman *et al.*, 1985:42). It is also essentially defined from the customer's point of view as “an assessment of the service one receives compared to his/her expectations regarding it” (Fisk and Grove, 1995:107). Service quality, as perceived by customers stems from a comparison of what they feel service

organisations should offer with their perceptions of the performance of organisation providing these services. Along these lines, only one definition of quality is judged to be appropriate by service scholars, and that definition is controlled by the extent to which a service meets the expectations of customers (Reeves and Bednar, 1994:427). Therefore, a focus on customers is the key to adopting and delivering service quality management.

As for perceived quality, Parasuraman *et al.* (1988:15) define it as “the customer’s judgment about an entity’s overall excellence or superiority”. They further explain that it is a form of attitude, related but not equivalent to satisfaction, and results from a comparison of expectations with perceptions of performance. It is, therefore, viewed as the degree of difference between customers’ perceptions and expectations. However, they noted that customer do not use the term quality in the same way as researchers and marketers, who define it conceptually. The conceptual meaning differentiates between mechanistic and humanistic quality. The mechanistic quality comprises an objective aspect or features of a thing or event; as for the humanistic quality comprises the personal reaction of people to objects and is therefore a highly relativistic experience that varies between judges (Parasuraman *et al.*, 1988:15).

Customers perceive higher risks in purchasing of services due to the intangible nature of these services (Howcroft *et al.* 2003:65). Furthermore, service quality is trickier for customers to evaluate than goods quality. It is because the criteria they use to evaluate service quality may be more difficult for the marketer to grasp. Additionally, customers do not evaluate service quality solely on the outcome of a service; but they also think about the process of service delivery. Determining and measuring customers’ expectations is a complicated matter because often customers do not know what their expectations are, especially with rarely purchased products and/or services (Reeves and Bednar, 1994:433). Hence, researchers must acknowledge that different customers place difference value on the attributes of services that they receive.

Therefore, the only criteria that matter in evaluating service quality are described by customers. Reeves and Bednar (1994:433) argue that if a company can constantly determine or guide customers’ expectations, and meet these expectations, its competitive advantage will be a tough one to defeat. Although a majority of the

service scholars has accepted the conformance-to-specifications definition of quality, the meeting-and/or-exceeding customers' expectations definition of quality is now broadly more accepted (Reeves and Bednar, 1994:427).

There is also a distinction between service quality and satisfaction. Perceived service quality as defined by Parasuraman *et al.* (1988:16) is “a global judgment, or attitude, relating to the superiority of the service”. Whereas, satisfaction is related to a specific transaction and described as “an evaluation of an emotion” (Cronin *et al.*, 2000:204). In other words, it indicates the level of which a customer thinks that the utilisation of a service instigate to cheerful feelings.

The other way to reflect about quality is operational efficiency, in other words, if an organisation can determine the most efficient way to produce products and services, without wasting time and resources, and restore unsatisfactory services, it will also become more flourishing (Othman and Owen, 2005:70). Therefore, planning and determining effective strategy is the first essential step to achieve operational efficiency which leads to better service quality.

As a result, nowadays, service quality plays an important role in many industries, especially in banking services. This is because excellent service quality is not an elective competitive strategy which may, or may not, be embraced to differentiate one bank from another, but it is crucial to corporate profitability and resilience for many banks around the world (Othman and Owen, 2005:71).

After discussing the various definitions of quality, service quality and perceived service quality, the following sections will evaluate the concepts and designs of service quality.

## **2.3 CONCEPTS AND DESIGNS OF SERVICE QUALITY**

Quality has been studied for a long time and much has been put in writing about how quality should be dealt with in an organisation (Badri *et al.*, 1995:36). Many authors have repeatedly discussed the importance of quality management essential factors such as top management leadership for quality, employee involvement in quality,

employee training, and supplier quality management (Parasuraman *et al.*, 1985; Berry *et al.*, 1988; Cronin *et al.*, 2000). As a result, many concepts of quality have been developed which includes Quality Control (QC), Total Quality Management (TQM), and Service Quality (SERVQUAL).

### **2.3.1 Quality Control (QC)**

The concept of Quality Control (QC) emerged in the US in 1920s (Berk and Berk, 2000:1). During that time, QC was intended to basically control, or limit, the escape of defective items in manufacturing processes. The earliest QC idea was to inspect the output of industrial process, which is to segregate the defective products from the good ones.

However, several management theorists such as Shewhart, Deming and Juran have expanded upon this idea. Moreover, Shewhart was considered the ‘grandfather’ of QC (Ree, 2009:26). He applied statistics to the manufacturing processes in World War I (Berk and Berk, 2000:1). He believed that the use of statistical process management methods could provide an early warning, and allowed the process to be adjusted prior to producing defective product. According to him, the lack of information greatly hampered the efforts of control and management processes in a production environment.

In order to aid managers in making scientific, efficient and economic decisions, Shewhart developed the Statistical Process Control methods. His control charts were used to distinguish between assignable sources of variation, and pure chances of variation. He also studied randomness and acknowledged that variability exists in all manufacturing processes (Ree, 2009:26). He further argued that, reducing variability was comparable to quality improvement.

Nevertheless, Shewhart’s control charts depict the performance of a process over time, and determine whether the process should be investigated. The charts also implies two things: (i) the observed process is not currently subject to any large strange influence; (ii) that the major characteristics of subsequent items produced by the process fit in to the same statistical distribution, but are statistically independent of

each other (Trietsch, 1999:2). However, this study argues that, most quality problems are due to familiar causes; therefore, it is the management duty to deal with these problems by improving the approach.

### **2.3.2 Total Quality Management (TQM)**

As for Total Quality Management, Dale (1999: 3) quoted the International Standards Organisation (ISO) definition of TQM as “management approach of an organisation, centered on quality, based on the participation of all its members and aiming at long-term success through customer satisfaction, and benefits to all members of the organisation and to society”. The improvement of TQM as it is known nowadays was determined by a number of quality management specialists that have had most important impacts on organisations throughout the world.

Furthermore, the current research that focus into customer services has had a decisive impact on the general approach to quality management including TQM (Grönroos, 1993:12). As a result, customer orientation is a central aspect of TQM programmes. Accordingly, TQM is considered to be a long-term corporate strategy. It is based on three principles: (i) customers (ii) employees (iii) process orientation (Pfeifer, 2002:41). However, Grönroos (1993:12) argues that such programmes in TQM are unsuccessful because of the fact that the marketing strategy in the TQM programmes is often missing. Another criticism by Grönroos (1993:12) is that TQM has been developed by non-marketing people who just recently observed that customers are important to the success of business.

In addition, all TQM-related activities are aimed at ensuring a continuous improvement of the performance of a company. In other words, a continuous improvement means using the ability of all staff to improve the business in order to achieve its target. It is argued that TQM creates the conditions needed in order to satisfy the stakeholders in a company by providing excellent performance and results (Pfeifer, 2002:41). Therefore, the systematic and consistent application of TQM is a strategy used by companies to achieve or secure a leading position in international competition. Nevertheless, Pfeifer (2002:4) states that the essential factor is that the TQM approach solves the contradiction between the three targets of increasing quality, of lowering costs and of reducing cycle times.

Furthermore, TQM demands a rigorous change in the way of thinking about leadership and human resource management at all levels of an organisation (Pfeifer, 2002:10). Therefore, extensive staff training is essential in TQM in order to increase the capabilities and performance of employee. In other words, organisations should encourage their personnel to work independently, be willing to assume responsibility, and be able to work in a team.

According to Dale (1999: 4), the four best acknowledged experts in the Western world are Crosby, Deming, Feigenbaum and Juran. He further explains that no books on quality management would be comprehensive without some discussions of the ideas of these experts. He notes that in addition to the approaches and philosophies of these four experts, the Japanese approach to quality management has also been broadly publicised. The theory of Imai, Ishikawa, and Shingo are all being utilised in the West, however, it is the work of Taguchi which is the best accepted among all (Dale, 1999:4).

In addition, Ree (2009:31) states that even though Ishikawa's works are more current, but the Taguchi's methods have been more widely accepted in Europe and America. The main rationale is that the Taguchi's methods were developed and used by engineers rather than statisticians (Ree, 2009:31). The methods are customised directly to the engineering context, whereby the methods allow engineer to subsequently control the quality level, enhance the quality level in cost-effective approach and observe the quality of performance.

### **2.3.3 Service Quality (SERVQUAL)**

SERVQUAL has a variety of potential applications. It can help a wide range of services and retailing organisations in assessing customers' expectations and perceptions of service quality. It can also help in pinpointing areas requiring managerial attention and action to improve service quality (Parasuraman *et al.*, 1988:36). It has a concise multiple-item scale with good reliability and validity that service providers can use to better understand the service expectations and perceptions of customers and as a result, improve their services (Parasuraman *et al.*, 1988:30).

The model developed into 22-items instrument for measuring customers' expectations and perceptions of the five dimensions: tangibles, reliability, responsiveness, assurance, and empathy (Berry *et al.*, 1988:36). The first dimension, 'tangibles', is associated with the physical facilities, equipment and appearance of personnel. The second dimension, 'reliability', is related to the ability to perform the desired service dependably, accurately and consistently. 'Responsiveness', the third dimension, is linked with the willingness to provide prompt service and help customers. The fourth dimension, 'assurance', is related with employees' knowledge, courtesy, and ability to convey trust and confidence. The last dimension is 'empathy' and it is referred to the provision of caring, and offers individualised attention to customers.

It can be used to assess a given organisation's quality along each of the five service dimensions by averaging the difference scores on items making up the dimension. However, meaningful responses to the perception statements require respondents to have some knowledge of or experience with the organisation being researched. Thus, SERVQUAL is limited to current or past customers of that organisation (Parasuraman *et al.*, 1988:31).

Another application of SERVQUAL is its use in categorising an organisation's customers into several perceived quality segments on the basis of their individual scores. These segments then can be analysed on the basis of (1) demographic, psychographic and/or other profiles; (2) the relative importance of the five dimensions in influencing service quality perceptions; and (3) the reason behind the perceptions reported. In addition, SERVQUAL can also be used by multi-unit retail companies to track the level of service provided by each store in the chain. By asking respondents to indicate the particular store in the chain with which they are most familiar, and to provide perception responses for that unit, a researcher can compare each store's average SERVQUAL score with the scores from other stores. A retailer can also use SERVQUAL to assess its service performance relative to its principal competitors. The two-section format of the instrument, with separate expectation and perception sections, makes it convenient to measure the quality of several organisations simply by including a set of perception statements for each organisation (Parasuraman *et al.*, 1988:35).

The basic assumption underlying the SERVQUAL scale is that performance below expectations (obtaining a negative score) leads to a perception of low service quality, while exceeding expectations (obtaining a positive score) leads to a high service quality. Therefore, perceived service quality is the result of the customer's comparison of expected service with the service received (Othman and Owen, 2005:70).

After identifying the concepts and designs of service quality which is the foundation of this study, the following section will discuss the dimensions and models of service quality.

## **2.4 DIMENSIONS AND MODELS OF SERVICE QUALITY**

### **2.4.1 Grönroos's Model**

Grönroos's (1982) model of service quality described how the quality of services is perceived by customers. This model contends that customers compare the service they expect with perceptions of the service they received in evaluating service quality (Parasuraman *et al.*, 1985:42; Howcroft, 1993:5). Hence, the customer's experience of a service can be expected to influence his post-consumption assessment of the service quality which he has encountered, *i.e.*, the perceived quality of the service (Grönroos, 1984:36).

According to Grönroos (1982:33), there are at least three basic characteristics of services: (i) the service itself is physically intangible, (ii) it is an activity rather than a thing, (iii) production and consumption are simultaneous activities. These characteristics differentiate the marketing situation and the customer relation of service organisations from a consumer products organisations (Grönroos, 1982:31). Thus, the customer of a service can and will assess the different characteristics of a service when evaluating its quality.

Grönroos's model suggests three different components for service quality: 'corporate image', 'technical quality of products', and 'functional quality'. 'Corporate image' is



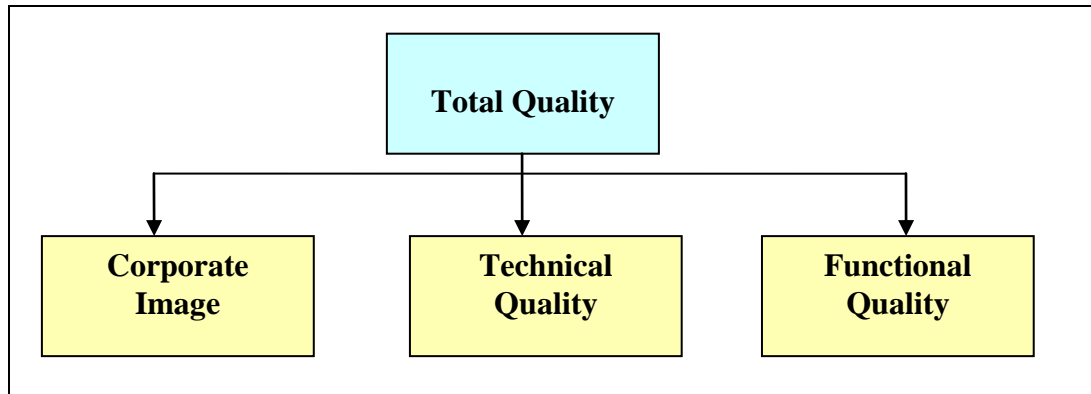
crucial for a service organisation because of the intangible nature of services (Grönroos, 1982:33), and it is also concerned with customers' perception of the service organisation (Ghobadian *et al.*, 1994:51).

Furthermore, customers take their previous experiences and overall perceptions of a service organisation to every encounter because they often have constant contacts with the same service organisation (Kang and James, 2004:267). Grönroos (1982:33) states that if the image is unappealing, customers may not even expose themselves to the marketing and operational activities of the organisation. He further argues that an excellent image will compensate for trivial problems in the other quality components, whereas an awful image may easily lead to significant and negative reaction to accidental problems with the technical or functional quality.

The second component of service quality according to Grönroos's model is the 'technical quality'. This means that the actual outcome of the service encounter is technically acceptable to customers. In other words, the customers perceive what they receive as the outcome of the process in which the assets are used (Kang and James, 2004:267). Furthermore, the service outcome can often be measured by customers in an objective manner (Ghobadian *et al.*, 1994:50). As an example of service outcome, the use of the safe deposit box in a bank, must lead to a correct result; the bonds and documents are safe.

The third component is the 'functional quality'. It is concerned with the interaction between the service provider and the customer and often perceived in a subjective manner (Ghobadian *et al.*, 1994:50). Returning to the safe deposit box example, this element of service quality is concerned with factors such as: how the safe deposit service is rendered; the courtesy shown to the customer; physical circumstances of the reception area and amount of explanation provided in terms of what needs to be done. In other words, 'functional quality' is how the 'technical quality' is transferred to the customer. In short, 'technical quality' expresses what the customer receives, whereas 'functional quality' refers to how he receives a service. However, in the overall quality judgment, both dimensions are important (Haller, 1995:14). The following diagram provides an overview of Grönroos's model of service quality.

**Figure 2.1: Grönroos's Model of Service Quality**



*Source: Grönroos (1982:33)*

Nevertheless, managing the perceived service quality means that the organisation has to match the expected service and the perceived service to each other to ensure that the customer satisfaction is achieved (Grönroos, 1984:43). Along these lines, according to Grönroos's model, management has to understand the importance of the 'technical quality', 'functional quality', and 'corporate image'; and that the quality dimensions are interrelated.

In 1982, Grönroos formulated the internal marketing concept, which proposes that the internal market staff, is best motivated for service mindedness and customer-oriented performance by an interactive marketing function (Grönroos, 1994:14). He further argues that without active and continuous internal marketing efforts, the interactive marketing effect on customers will weaken, service quality will deteriorate and customers will start to find flaws which result in negative outcome on profitability (Grönroos, 1994:14). Thus, to achieve customers' satisfaction, more values should be added by the service provider, not only to the core products or services but also to the internal marketing efforts.

#### **2.4.2 Cronin and Taylor's Model**

Cronin and Taylor (1992:58) developed and proposed an alternative to the SERVQUAL scale in the analysis of the relationships between service quality, consumer satisfaction, and purchase intentions. Their research model for the measurement of the service quality constructs which is more concise performance-only scale is called SERVPERF. The SERVPERF model is composed of 22

perception items in the SERVQUAL scale, however, excludes any consideration of expectations. This model was tested in some industries (banking, dry cleaning and fast foods). Cronin and Taylor (1992:58) argue that the SERVPERF scale appears to conform more closely to the implications of the satisfaction and attitude literatures. In addition, they also indicate that the SERVPERF scale explains more of the variation in service quality than the SERVQUAL does (Cronin and Taylor, 1992:64).

According to Fisk and Grove (1995:108), the Cronin and Taylor's model suggests that a performance-based measure of service quality may be an improved means of measuring the service quality construct. They further explain that rather than specifying expectations *a priori*, such measures indirectly tap customers' expectations as the comparison points against the performance that determines the excellence of his/her service experience.

In addition, the SERVPERF model is argued to be more efficient in comparison with the SERVQUAL scale, whereby SERVPERF reduces 50% the number of items that must be measured (44 items to 22 items). In other words, SERVPERF model only measures performance, whereas, SERVQUAL model measures performance and expectations. The SERVPERF model only measures performance perceptions because it assumes that respondents provide their ratings by automatically comparing performance perceptions with performance expectations. On the other hand, even though Cronin and Taylor (1992) conceptualising efforts may have contributed to the popularity of SERVPERF, it have not reduced SERVQUAL's usage among scholars (Carrilat *et al.*, 2007:473).

Accordingly, Cronin and Taylor (1994:129) state that SERVPERF has greater construct validity based on the fact that its measures also exhibit convergent and discriminant validity. They also claim that SERVPERF scale can provide a longitudinal index of the service quality perceptions. In addition, the model can provide managers with a summed overall service quality score that can be formed relative to time and certain consumer group (Cronin and Taylor, 1994:130).

### **2.4.3 Parasuraman *et al.*'s Model**

The most popular model of service quality has been SERVQUAL, which was designed by Parasuraman *et al.* (1985). They began their work with qualitative research, which suggested ten dimensions of service quality (reliability; responsiveness; competence; access; courtesy; communication; credibility; security; understanding / knowing the customers; and tangible).

Reliability involves consistency of performance and dependability. It means that the firm performs the service right the first time and honors its promises. Responsiveness concerns the willingness or readiness of employees to provide service. It includes timeliness of service. Competence signifies possession of the required skills and knowledge to perform the service. Access entails approachability and ease of contact. It means that the service is easily accessible by telephone and the waiting time to receive service is not extensive. Courtesy translates into politeness, respect, consideration, and friendliness of contact personnel. Communication denotes keeping the customers informed in language they can understand. It also indicates listening to customers. Credibility connotes trustworthiness, believability, and honesty. It places having the customer's best interests at heart. Security is the freedom from danger, risk or doubt. Understanding the customer requires the effort to understand the customer's needs. Tangibles include the physical evidence of the service such as facilities and appearance of personnel (Berry *et al.*, 1985:46).

Later, through various qualitative research, Parasuraman *et al.* (1988) evolved a set of five dimensions, namely: Tangibles, Reliability, Responsiveness, Assurance and Empathy (Othman and Owen, 2005:71; Howcroft,1993:6). Tangibles stand for the physical facilities, equipment and appearance of personnel. Reliability denotes the ability to perform the desired service dependably, accurately and consistently. Responsiveness involves the willingness to provide prompt service and help customers. Assurance indicates employees' knowledge, courtesy, and ability to convey trust and confidence, while empathy means the provision of caring, individualized attention to customers (Berry *et al.*, 1988:37).

Table 2.1 provides an overview of the SERVQUAL dimensions and list of items in each dimension.

**Table 2.1: SERVQUAL Dimensions**

No.	SERVQUAL Dimensions and Items
	<b>TANGIBLES</b>
1.	Modern equipment.
2.	Visually appealing facilities.
3.	Employees who have a neat, professional appearance.
4.	Visually appealing materials associated with the service.
	<b>RELIABILITY</b>
5.	Providing services as promised.
6.	Dependability in handling customers' service problems.
7.	Performing services right the first time.
8.	Providing the services at the promised time.
9.	Maintaining error-free records.
	<b>RESPONSIVENESS</b>
10.	Keeping customers informed about when services will be performed.
11.	Prompt service to customers.
12.	Willingness to help the customers.
13.	Readiness to respond to customers' requests.
	<b>ASSURANCE</b>
14.	Employees who instill confidence in customers.
15.	Making customers feel safe in their transactions.
16.	Employees who are consistently courteous.
17.	Employees who have the knowledge to answer customer questions.
	<b>EMPATHY</b>
18.	Giving customers individual attention.
19.	Employees who deal with customers in a caring fashion.
20.	Having the customer's best interest at heart.
21.	Employees who understand the needs of their customers.
22.	Convenient business hours.

Source : (Parasuraman *et al.*, 1994:207)

Among the various models of measuring service quality, Parasuraman *et al.*'s (1994) model will be adopted in this study. The following section will explain about the features of service quality and service quality gap as described in Parasuraman *et al.*'s model of service quality.

## **2.5 FEATURES OF SERVICE QUALITY AND SERVICE QUALITY GAPS**

Although there are many concepts and designs of service quality applicable to both products and services, it can be argued that quality management in relation to services demands a different approach when compared to products; for the straightforward reason that services have different distinguishing features. The features and characteristic that differentiate services from manufacturing in term of quality have been described by many writers (Parasuraman *et al.* 1985; Zeithaml *et al.*, 1990; Ghobadian *et al.* 1994; Othman and Owen, 2005; Al-Zaabi, 2006) and can be summarised as follows:

(i) The nature of the services is basically intangible and not storable. This implies a need for better improvement strategies. Unlike goods quality, which can be measured objectively by such indicators as durability and numbers of defects, service quality is an abstract and elusive construct (Parasuraman *et al.*, 1988:13). Services are performances rather than objects, therefore precise manufacturing specifications concerning uniform quality can rarely be measured, inventoried, tested and verified in advance of sale to assure quality (Parasuraman *et al.*, 1985:42). Accordingly, customers often look for signs of quality, for example: word of mouth; reputation; accessibility; and communication on purchasing decisions (Ghobadian *et al.*, 1994:45).

(ii) Services are heterogeneous. It is often complicated to reproduce a service constantly and exactly the same (Ghobadian *et al.*, 1994:45) . Their performance often varies from producer to producer, from customer to customer, and from day to day. Thus, it is not easily inspected or examined. Consistency of behavior from service personnel is difficult to assure because what the firm intends to deliver may be entirely different from what the customer receives (Parasuraman *et al.*, 1985:42; Ghobadian *et al.*, 1994:45). Moreover, priority and expectations of customers may

change each time they use the services and that priority and expectations may differ during the delivery of the service. Thus, the variability of service from one time to another and from one customer to another makes quality assurance and control not easy (Ghobadian *et al.*, 1994:45).

(iii) Production and consumption of many services are inseparable and demonstrate simultaneity. It also does not have a limit. Quality in services is not engineered at the manufacturing plant, and then delivered intact to the customer. It happens during service delivery, usually in an interaction between the customer and the contact person from the service firm (Parasuraman *et al.*, 1985:42). It is therefore becomes virtually impossible to detach the service from the product itself (Howcroft and Hill, 1992:4). Thus, the high visibility of the conversion process means that it is not possible to conceal error or quality slip-up (Ghobadian *et al.*, 1994:45). As a result, this forms the quality of service and customer satisfaction greatly dependent on the transactions between employees and customers.

(iv) Human contact: services are often characterised by the existence of human contact between employee and customers. Human performance plays a major role in customers' perception of service quality (Berry *et al.*, 1988:37). It is also concerned with psychological and ethical matters.

In some cases, although, management does understand customers' expectations and set appropriate specifications, the service delivered by the organisation still falls short. The difference between service specifications and the actual service is the service-performance gap (Berry *et al.*, 1988:38). While Parasuraman *et al.* (1985: 44) identify other gaps:

- (i) Consumer expectation-management perception gap;
- (ii) Management perception-service quality specification gap;
- (iv) Service quality specifications-service delivery gap;
- (v) Service delivery-external communications gap;
- (vi) Expected service-perceived service gap.

‘Consumer expectation-management perception gap’ is defined as “a management lack of understanding of customers’ expectation” (Clement and Selvam, 2006). In other words, it is the difference between customers’ expectations of the standards of service and the management’s perception of these expectations. This gap occurs as a result of service organisation executives may not always understand what features connote high quality to customers in advance, what features a service must have in order to meet customers’ need, and what levels of performance on those features are needed to deliver high quality service (Parasuraman *et al.*, 1985:45). Hence, the gap between consumers’ expectations and management’s perceptions of these expectations will have an impact on the consumer’s evaluation of service quality as a result of the lack of initiative by the management to listen to customers.

‘Management perception-service quality specification gap’ is described by Clement and Selvam (2006) as “a lack of analysis, design and definition of service quality specifications, or when specification exist; an inconsistency between those specifications and the strategy or the perception that management held of customers’ expectations”. For instance, customers view quick response to a comment or request as a vital component of high quality service. However, sometime it is difficult to establish specifications to deliver quick response consistently because of lack of trained service personnel and wide fluctuation in demand (Parasuraman *et al.*, 1985:45). Another reason for the gap between expectation and the actual set of specifications established for a service is the absence of total management commitment to service quality. Thus, the gap between management perceptions of customers’ expectations and the organisation’s service quality specifications will affect service quality from the customer’s viewpoint in terms of aggravated service variables and lower quality.

‘Service quality specifications-service delivery gap’ is identified as “inconsistency between service design/ service quality specifications and the service actually being delivered by the service provider” (Clement and Selvam, 2006). This gap appears as a result from employees’ inability or unwillingness to perform according to the quality specifications. Even when guidelines exist for performing services well and treating consumers correctly, high quality service performance may not be a certainty (Parasuraman *et al.*, 1985:45). Although employees exert a strong influence on the



service quality perceived by customers; however, the employee performance cannot always be standardized. Therefore, the gap between service quality specifications and actual service delivery will affect the customers perceived service quality in terms of the level of reliability actually delivered by the service provider.

‘Service delivery-external communication gap’ is defined as “inconsistency between what is externally communicated (promised) and what the service delivery system is actually able to provide the customers with” (Clement and Selvam, 2006). As stated by Al-Zaabi (2006:53), advertisement and the media in general have an extremely significant effect on customer expectations. If expectations play a major role in customers’ perceptions of service quality, the organisation must be certain not to promise more in communications than it can deliver in reality (Parasuraman *et al.*, 1985:46).

Another intriguing way in which external communications can influence service quality perception by customers is when companies neglect to inform customers of special effort to assure quality that are not visible to customers (Parasuraman *et al.*, 1985:46). Hence, the gap between ‘actual service delivery and external communications’ about the service will affect service quality from a customer’s viewpoint in terms of the level of accurate and comprehensive information offered by the service provider.

The last gap is ‘expected service-perceived service gap’. This gap is referred as the degree of difference between the perceptions and the expectations of the customers (Al-Zaabi, 2006:52). The key ensuring good service quality is meeting or exceeding what customers expect from the service (Parasuraman *et al.*, 1985:46). It appears that judgments of high and low service quality depend on how customers perceive the actual service performance in the context of what they expected. In addition, the fifth service quality gap is considered to be the net result of the occurrence of the other four gaps (Al-Zaabi, 2006:53). Thus, the quality that a customer perceives in a service is a function of the magnitude and direction of the gap between expected service and perceived service.

After identifying the features and service quality gaps, the next section will present customers' perceptions of service quality.

## **2.6 CUSTOMERS' PERCEPTIONS OF SERVICE QUALITY**

Services can only be experienced, and the production of a service takes place at the same time and the same place as its consumption. Fonseca (2009: 353) argues that customers' perception of service quality during a service delivery will be influenced mainly by three factors: *technical quality* (what the supplier delivers), result of know-how available to the organisation, with objective evaluations; *functional quality* (how the supplier delivers), representing the way the service is provided (staff appear to be the key element in the service encounter and more precisely their capacity to answer or solve problem encountered by the customer on the premises); and *the image* (of the organisation which delivers the service, and the supplier's corporate image). Berry *et al.* (1985: 46), however, are in the opinion that customers' perceptions of service quality result from comparing expectations prior receiving the service and actual experiences with the service. If expectations are met, service quality is perceived to be satisfactory; if unmet, less than satisfactory; if exceeded, more than satisfactory.

Service is sold first, and then it is produced, often in the presence of the customer. Frequently, production and consumption are inseparable. For example, customer cannot be transported by a train company without being on the train. They cannot have their sickness cured without going to the doctor's clinic. In effect, for many services, the customer is in the factory. The customer experiences the production of the services himself. How service personnel conduct themselves, how they speak and dress, all potentially shape the customer's perceptions of service quality (Berry *et al.*, 1985:47).

The customer's perceptions of service quality also depend on satisfaction of two sets of service quality. In addition to the ultimate customer, the intermediate customer- the contact person who depends upon support services provided elsewhere in the organisation must also be served. For service quality to be satisfactory, the customer contact personnel must be willing and able to perform the service (Berry *et al.*, 1985:48).

Furthermore, Berry *et al.* (1985: 49) argue that credibility of the service firm proves to be a major determinant of service quality perceptions. A service firm can enhance its credibility for “being on the customer’s side” by helping customers through education. The customers also have desire to have more information about the products and emphasised the need for better involvement with the service providers by means of greater deliberation and talking (Howcroft *et al.*, 2007:488). More knowledgeable customers are likely to make better decisions, leading to greater satisfaction (Berry *et al.*, 1985:50).

From a theoretical point of view, expectations should differ between settings. One does not expect the ambience of an expensive hotel at a budget one. Thus, it is reasonable to expect that perceptions of quality are influenced by expectations. According to Carman (1990:48), expectations can be described as the aspects of the service quality they expected should be important indicators of quality. In addition to that, service providers need to discover what customers expect. In this way, they can increase satisfaction by decreasing expectations.

Presumably, expectations come mainly from past experience with similar services, but word-of-mouth and mass media also play important roles. If many first-time customers use the service, such as the placement service or the hospital, expectations will not be well formed, and a seller is well advised to determine just how well formulated and how realistic the expectations of these new customers may be. For commonly used services such as most retail stores, banks, telephone service, restaurants, or hotels, the expectations of regular customers may be adequate (Carman, 1990:490). In addition, expectations do change with familiarity.

The expectations customers bring to the service situation play a pivotal role in the quality perceptions they ultimately develop. Avoiding the promotional temptations to over promise can help a company achieve a good quality image. Raising expectations to unrealistic levels may lead to more initial business, but invariably fosters customer disappointment and discourages repeat business. It is better to exceed customer expectations than to let them down (Berry *et al.*, 1985:50). In addition, Berry *et al.*

(1985:51) state that some service companies could improve quality perceptions by explaining to customers the underlying rationale for policies that can frustrate them.

The following section will elaborate on related issues such as the relationship between service quality and customer satisfaction, and the relationship between service quality and profitability.

## **2.7 RELATED ISSUES**

### **2.7.1 Service Quality and Customer Satisfaction**

Customer's satisfaction is central to the marketing concept, and a key issue for all organisations that wish to create and keep a competitive advantage in this highly competitive world (Fonseca, 2009:352). Service quality is constantly imaged in the literature as a distinctive form of customers satisfaction (Kassim and Bojei, 2002:845). In addition, Fonseca (2009:352) defines customer satisfaction as "an overall assessment of the performance of various attributes that constitute a service".

However, Storbacka *et al.* (1994: 24) argue that there has been some confusions regarding the differences between service quality and customer satisfaction. Perceived service quality can be considered to be an outsider perspective, whereby it need not even be encountered; it can be established on information about a service provider through word-of-mouth or advertising (Storbacka *et al.*, 1994:24). On the other hand, satisfaction refers to an insider perspective, whereby it is the customer's personal experiences of a service that has been assessed in terms of what value was received by him.

Therefore, it is essential for organisation to know how satisfied their customers are in order to device successful marketing strategy and organisational development. It is important to the organisation to understand the ways that services can influence customer behavior in term of satisfaction. In this way, it can achieve a consistent customer's satisfaction measures, knowing that satisfaction level increases as the congruence between the organisation's goals and the customers' interest also increases (Fonseca, 2009:352).Furthermore, the emphasis on trust and having a

relationship, is also highly important to the organisation's strategies (Beckett et al., 200:24).

As a result, the customer's satisfaction of a service and the reputation of the service and of its supplier, depends to a substantial degree on how well the satisfaction factors are administered (Dale, 1999:31). The question arises as to what leads to customer satisfaction. The common-sense presumption that a positive outcome of service is linked to the matching of expectation and experience of perceived service quality (Armistead *et al.*, 1995:93).

In addition, quality is about conformance to a service design or service specification. Once the design is set, quality is about ensuring that the end to be delivered to the customer meets this specification or design. As a consequence, from a service point of view, customer satisfaction is about monitoring the quality of delivery of the service, thus measuring how well the organisation is delivering the service (Fonseca, 2009:353). In this manner, the better the quality of service delivered, the higher the customer satisfaction towards the service.

Consequently, Fonseca (2009: 353) suggests that by knowing customers' perceptions about service quality, organisation can measure customers' service satisfaction, using service quality as an indirect approach to customer satisfaction. Furthermore, feelings of satisfaction are believed to lead to future purchase intentions and intention is the determinant of actual purchase as Liljander and Strandvik (1995:51) noted that, overall those who have studied satisfaction and intentions have found them to be positively correlated. Hence, excellent service quality is the key element because it creates genuine customers, which will return to the same organisation again and promote it to others. Noticeably, excellent service organisations perform better because they provide better service quality for their customers.

On the other hand, dissatisfied customers will have some effect to the service organisation. It may end the relationship between them abruptly although it may have been preceded by years of satisfactory routine (Storbacka *et al.*, 1994:30). Accordingly, customers respond to organisations that offer excellent service quality because customers perceive more value in their offers than in competitive offerings

(Zeithaml *et al.*, 1990). Value is the customers' overall assessment of the utility of a product or service based on their perceptions of what is received and what is given. The concept of value helps explain how companies with strong service reputations are often able to charge higher prices than their competitors. These customers may be quite willing to assume more monetary cost to reduce non-monetary cost and/or to obtain an otherwise stronger service (Zeithaml *et al.*, 1990).

### **2.7.2 Service Quality and Profitability**

The fundamental supposition is that customer contentment leads to profitability. The supposition is rooted on the suggestion that by enhancing the quality of the provider's service, customers' satisfaction is improved (Storbacka *et al.*, 1994:23). Thus, companies always look for profitable ways to invest in quality improvement projects and initiatives. These companies are willing to employ qualified experienced staff, encouraging continuing education and providing training to personnel in order to demonstrate a higher service quality (Dale, 1999:11). Accordingly, a satisfied customer creates a strong relationship with the provider and this leads to customer loyalty. As a result, customer loyalty produces constant revenues and by adding the revenues over time, profitability is improved (Storbacka *et al.*, 1994:23).

In view of that, superior quality is proving to be a winning competitive strategy. Thus, the leading companies such as Mc-Donald's, American Express, Domino's Pizza, Disney World and others are obsessed with excellence service (Zeithaml *et al.*, 1990). These companies use service to be different and earn customers' loyalty which leads to positive word-of-mouth advertising.

Zeithaml *et al.* (1990) state that in the short term, greater quality yields increased revenue via premium prices. While in the longer term, superior and improving quality is the more successful way for a business to expand. Hence, this will lead to both market expansion and gains in market share. Even though quality improvement frequently entails increased investment in technology, marketing research, employee training, performance measurement, reward system and others, these companies with excellent service quality perform better on the bottom line (Zeithaml *et al.*, 1990).

Therefore, it is argued by Storbacka *et al.* (1994:33) that there are basically two ways to increase profitability; raise prices or increase the patronage concentration of the customers. Consequently, revenue will increase if the cost is decreased. Hence, what steers down costs most considerably is market share expansion. Companies with great market shares gain cost-wise from scale economies. Furthermore, these companies with high market share created through high quality benefit from these scale economies and from higher profit due to massive sales volume and premium prices (Zeithaml *et al.*, 1990).

In addition, Storbacka *et al.* (1994:23) argue that profitability is improved by focusing on existing customers since satisfaction leads to lower costs, higher customer loyalty and increased profit. They further explain that keeping the existing customers is cheaper than acquiring new ones and that the customer loyalty increases the cash flow of the service organisation. Thus, without an understanding of the relationship of service quality and profitability, a service organisation will not be able to make full use of the competitive advantage opportunities offered by this strategy.

The next section will present empirical studies that used SERVQUAL in their research.

## **2.8 EMPIRICAL STUDIES ON SERVICE QUALITY PERFORMANCE FOR BANKS AND FINANCIAL INSTITUTIONS**

SERVQUAL appears to be considered the most popular measuring tool in customer satisfaction studies. It asks customers to compare their perceptions of the service against what they expected to receive from the service supplier. This model is useful and applicable in a broad range of industries with a minor modification to the original model. It is also useful in understanding the customers' need and their expectations and perceptions.

Berry *et al.* (1988) conducted a research on quality service consisted of two distinct, sequential phases. The first phase focused on how both customers and service company executives perceive and evaluate service quality. The second phase was more empirical and it developed a more comprehensive instrument for measuring

customer perceptions of service quality. They developed 97 items, fleshing out the 10 dimensions of service quality identified in the first phase. Their data are received from 237 customer-contact personnel (bank, credit-card issuer, appliance repair and maintenance firm, and telephone company) or 55% of the sample, and 138 completed questionnaires or 14% of the respondents. They further refine the data and confirmed their reliability and validity. The final instrument consisted of 22 items which later is known as SERVQUAL. The findings of their research suggest these expectations cover five areas: 'tangibles', 'reliability', 'responsiveness', 'assurance' and 'empathy'. Nevertheless, 'reliability' has clearly emerged as the most important dimension (Berry *et al.*, 1988:37).

Study by Parasuraman *et al.* (1991) discusses the findings from a follow-up study in which they refined SERVQUAL instrument and reexamined its reliability and validity, and replicated it in five different customer samples (one telephone company, two insurance companies and two banks). They also compare the findings of their study with those of other researchers who have recently employed and evaluated SERVQUAL. Following its pretest and refinement instrument, a questionnaire containing the modified instrument was mailed to about 1,800 to 1,900 randomly chosen customers of each company. The combined response rate for their study was 21%. Their finding suggests that from the five replications in the current study, tangibles consistently split into two sub-dimensions: one focusing on equipment and facilities and the other focusing on personnel and communication materials (Parasuraman *et al.*, 1991:423).

Another study by Parasuraman *et al.* (1994) identifies unresolved issues and develops three alternative questionnaire formats to address them. The study discusses an empirical research that evaluated the three formats in four different sectors (computer manufacturer, retail chain, auto insurer, and life insurer). They combined insights from past SERVQUAL conceptualisations with findings from a multi-sector study to develop an integrative model of customers' service expectations. Their refined research design included three alternative questionnaire formats, one incorporating the difference-score formulation and the other two incorporating direct measures of service quality.



The study sample size was set at 800 customers per questionnaire version per company. The retail chain, auto insurer, and life insurer provided samples of 2,400 each, however, the computer manufacturer provided a larger sample of 5,270 customers because it wanted to conduct its own detailed analysis. The overall response rate for this study was 25%. Their findings suggest that, while both the three-column and two-column formats provide measures of service superiority and adequacy, the three-column format calls for three separate ratings and may be more time-consuming for respondents. Whereas regarding the diagnostic value of the information obtained, the three-column format is superior to the two-column format, which, in turn, is superior to the one-column format (Parasuraman *et al.*, 1994:218).

A study conducted by Lewis *et al.* (1994) also involves the use of SERVQUAL. In their research, service quality in financial services is considered in relation to student market. The importance of the student market for the banks and building societies is highlighted, followed by an introduction to service quality and its measurement. The result of their study stated that in overall satisfaction, a majority of the students are very satisfied with the quality of service they received from their banks and building societies.

However, the measurement of customers' expectations and perceptions reveals a number of service quality gaps or shortfalls (product knowledge and experience, definitions and explanations of services, speed and efficiency of dealing with queries). The customers' perceptions of banks performing below desired levels are from the slow service and inconvenience opening hours offered by the banks. Whereas, turning to loan and overdraft arrangements, a greater requirement for overdrafts is needed among students than among other segments of youth market. The research has been exploratory in nature with regard to identifying dimensions of loan/ overdraft services, and also in relation to the trial graphic positioning scale to measure students' expectation and perceptions. The result suggests a number of areas where the organisations can focus attention to improve their "relationship" with students (Lewis *et al.*, 1994).

A study by Wuhrer (1995) in Austrian banking industries also used SERVQUAL questionnaire, with some additional in-depth interviews with marketing and human

resource managers. He combined the SERVQUAL model with the content of the questionnaire to address the underlying problem situation. The study concluded that the development of problem-tailored research instruments is highly recommended. This nation-wide study provides information about the quality position among players on an aggregate and strategic level (Wuhrer, 1995:11).

In the US, a study of service quality by Allred (2001) stated that service quality has become a frustrating and unsatisfying experience. Recent indicators suggest that customer satisfaction with service has been steadily declining. Surveys were administered to bank and credit union employees about service quality they receive from their managers using the SERVQUAL questionnaire. The results did not support the study's hypothesis that credit union managers would receive higher scores than bank managers. However, the results and implications are important for researchers and practitioners interested in improving service quality at banks and credit unions (Allred, 2001).

The focus of the study of Paswan *et al.* (2004) is to better understand search quality dimensions in the context of financial institutions. Motivation of the research is that search quality is crucial in a financial services context because providers tend to be viewed as relatively undifferentiated, and hence service quality becomes a key to competitive advantage. SERVQUAL dimensions are used (tangibility, empathy, assurance). 17 scale items for search quality were developed for the questionnaire. The study also conducted interviews with bank officials, customers, and extant studies. The data were analysed using factor analysis and ANOVA/MANOVA.

Their result shows some indications of how customers evaluate financial service providers during the search process. The dimensions of intangibles- empathy and assurance, tangible and routine and loan transaction costs seem to make sense. These factors display acceptable level of internal consistency as well as convergent and discriminant validity is very encouraging. Perceptually almost every bank performs more or less at the same level on both intangible and tangible factors.

Furthermore, the relationships between these search quality factors and overall assessment of the respondents' current bank was also investigated. The result

indicated that higher levels of importance accorded to search quality factors, especially loan transaction costs, were associated with extreme (good or bad) assessments of current bank. The importance of these search quality factors was also tested against contingency variables such as gender, marital status, age, household income, employment status, education and house ownership. Bank managers should be cognizant of search quality factors and their relations with the appropriate contingency variables (Paswan *et al.*, 2004).

In India, Padhy and Swar (2009) conducted a study on 3 major segments of bankers in India *i.e.* private, public and foreign banks to examine the salient features of service quality, gaps model and SERVQUAL based on customers' assessment of the banks' service quality. The SERVQUAL instrument (service gaps) was adapted for their study. Out of 440 respondents, only 300 questionnaires were fit to be analysed. Their results suggest that all banks fall below the expectations of their respective customers (because the scores are negative). However, foreign banks are relatively close to expectation of their customers in comparison with public sector banks and private sector banks. Their findings also suggest that a firm's internal market can be motivated to strive for customer-consciousness, market orientation and sales-mindedness through the application of accepted external marketing approaches.

The main objectives of Lin and Lu's study (2010) were to investigate the influence of service quality, the social significance of cause-related marketing and corporate image on purchase intention, and examine the moderating effects of customer trust on corporate image on purchase intention. They used SERVQUAL and their samples were chosen from consumers of 10 branches of E. Sun Bank in the Taipei metropolitan area. A total of 450 questionnaires were distributed, 419 were collected, leading to an effective response rate of 93%. Regression analysis was used to test the hypotheses. The findings are divided into 4 categories: (1) Service quality has a significantly positive effect on corporate image; (2) High social significance of cause-related marketing has a more significantly positive effect on corporate image than that of low social significance of cause-related marketing; (3) Corporate image has a significantly positive effect on purchase intention and (4) The moderating effects of

high customer trust in the influence of corporate image on consumers' purchase intention is greater than that of low customer trust (Lin and Lu, 2010).

The study by Sangeetha (2011) appraised various quality models and identified issues for future research based on the analysis of literature. It examined 14 different service quality models applicable to the banking industry. It also critically reviewed the different of service quality models to compile the various dimensions which emerged out of the studies, compared the similarities between them, studied their relevance and important in banking in the various cultural and cultural contexts and highlighted the limitations of the studies. The findings of the study revealed that the meaning of service quality in various service quality models in banking may have some universal aspects. It also suggests that the dimensions vary with the cultural and country context even within the banking industry. Thus, the development of the modified scale for measuring the service quality for a particular cultural or country context at a particular time is warranted.

Indeed, the collective findings from the various replications by other researchers provide consistent support for the reliability and validity for the SERVQUAL dimensions. However, the results from the replication studies vary from the original SERVQUAL study, which may be due to differences in data collection and analysis process. Even though SERVQUAL has gained popularity and its widespread application, the approach has been subject to numerous theoretical and operational criticisms. For example, a study by Lam (1995) using SERVQUAL in retail banking found problems with its dimensionality and the usefulness of expectation scores. Hence, the criticisms have given rise to the introduction of new service quality measures. Nevertheless, SERVQUAL model remain the basic model for majority of all other works and included other constructs and measures along with SERVQUAL dimensions in order to enrich the explanatory power of this model.

Some researchers have used SERVQUAL attributes entirely to investigate bank service while others have chosen to use part of the attributes (Kumar *et al.* 2009) or adding new attributes to represent the dimensions (see, for example study by Othman and Owen, 2002; Al-Zaabi 2006). Other researchers chose not to use SERVQUAL attributes to measure bank service quality. Among them are Cronin and Taylor

(1992:58), which developed and proposed an alternative to the SERVQUAL scale in the analysis of the relationships between service quality, consumer satisfaction, and purchase intentions. Their research model for the measurement of the service quality constructs which is more concise performance-only scale is called SERVPERF.

The alternative method (SERVPERF) was developed by Cronin and Taylor (1992) to provide a new method of operationalising the perceived service quality. Data of their study were gathered from personal interviews conducted in the US. A total of 660 usable questionnaires were collected randomly from customers. The 22 expectation and performance items were taken directly from the SERVQUAL scale. Their results suggest that a performance-based measure (SERVPERF) of service quality may be an improved means of measuring service quality construct. It reduces by 50% the number of items that must be measured.

While Grönroos's model (1982) suggests three different components for service quality: 'corporate image', 'technical quality of products', and 'functional quality'. According to Grönroos (1982:33), there are at least three basic characteristics of services: (i) the service itself is physically intangible, (ii) it is an activity rather than a thing, (iii) production and consumption are simultaneous activities. These characteristics differentiate the marketing situation and the customer relation of service organisations from a consumer products organisations (Grönroos, 1982:31). Thus, the customer of a service can and will assess the different characteristics of a service when evaluating its quality.

A study by Fonseca on Portuguese's organisation measured customer satisfaction in a public administration service based on the questionnaire inspired by the American Customer Satisfaction Index (ASCI) model. They used face to face interview technique. A sample of 873 customers was obtained and 17 questionnaires were considered non-valid. The study's objective was to apply a new conceptual model, and new technique as an approach to the modeling of customers' satisfaction, and develop an overall satisfaction index (OSI). The study measured customer's satisfaction indirectly as a latent variable using latent model segment (LMS). Three latent segment model were selected; the latent variable customer satisfaction had three classes: segment 1 with 50.4% of the customers, that represents "The very satisfied",

for those to whom everything is well in the organisation service; a segment 2, with 33.4% of the customers, representative of “The well satisfied”, not totally satisfied with the quality of the organisation, and a segment 3, with 16.2% of the customers, “Satisfaction demanders”, thinking that organisational quality can be improved. They also developed an overall satisfaction index which is important to show how the company as a whole is performing (Fonseca, 2009).

Nevertheless, the pioneer study of Parasuraman *et al.* (1985) has been a significant contribution in developing and improving the knowledge and understanding on banks’ service quality. Due to the pioneer research done by Parasuraman *et al.* (1985) on SERVQUAL, researchers who wished to conduct research employing service quality dimensions, have had the opportunity to employ SERVQUAL method entirely, or a part of it, or develop a whole new dimensions (Kumar *et al.* 2009). The findings from the literature signify that not all antecedents contribute equally to quality (Sangeetha, 2011:99) and researchers’ contribution in the service quality area might be subject to variation in different countries at different times. Hence, factors such as implications of culture and religion, marketing and service quality norms in the country context need to be taken into account in designing the service quality measurement.

## **2.9 SUMMARY**

This chapter has comprehensively discussed the research theoretical framework and model used in this study. It has defined quality and service quality. Next, the chapter has discussed the concepts and design of service quality such as Quality Control (QC), Total Quality Management (TQM) and Service Quality (SERVQUAL). It further discussed dimensions and models of service quality. It should be noted that this research is using Parasuraman *et al.*’s model (1991) of service quality as the main method to gauge opinion regarding the expectations and perceptions of customers towards service quality management of Islamic and conventional banks in Malaysia.

Subsequently, the chapter has discussed the features of service quality and service quality gap as introduced by Parasuraman *et al.* (1985). It further presents the debate on customer’s perception of service quality. Several matters and issues related to

service quality such as customer satisfaction and relationship between service quality and profitability has been discussed. It has also presented some of empirical studies that used SERVQUAL in their research.

In conclusion, the use of excellent service quality with the focus on customers throughout the entire organisation is a means by which the organisation can maintain a competitive edge over their rivals. Hence, demanding customers with high service quality expectations and an established reputation of quality can be very effective tools for customers' satisfaction that can lead to increased profitability.

## **Chapter 3**

### **Principles of Islamic Finance and Measuring Service Quality in Islamic Banking: A Literature Survey**

#### **3.1 INTRODUCTION**

In following Chapter 2, which discussed the research theoretical frameworks and models used from the Western point of view, this chapter resumes to examine the service quality management from the Islamic perspective and performance of Islamic banks. The contemporary commercial Islamic banking has existed since the 1970s to provide interest-free banking facilities. Mit Ghamr Local Savings Bank which is the first Islamic bank established in 1963 in a provincial rural centre in the Nile Delta of Egypt was the pioneer of the modern Islamic banking, but it was to be another 10 years, in the aftermath of the substantial rise in oil prices in 1973, before the Islamic banking sector was to make serious advances in the form of commercial banking (Abdullrahim, 2010). Since then, Islamic banking has witnessed an unprecedented development especially since the last decade of the twentieth century.

Currently, Islamic banking industry represents a small but growing division of the global banking industry. In some countries, such as Iran, Islamic banks are the only mainstream financial institutions, while, in others, Islamic banking exists on a parallel basis with the conventional banking (Haron and Shanmugam, 1997; Ilias, 2009:1). The tipping points of Islamic finance is the GCC region and Southeast Asia, which will continue to be the main centers for Islamic banking industry.

Islamic banks today, not only have existed in almost all Muslim countries, but have also operated in the other parts of the world to serve Muslim and non-Muslim customers (Haron and Shanmugam, 1997:1; Ilias, 2009). For instance, in August 2004, the United Kingdom's Financial Services Authority (FSA) approved a banking license for the Islamic Bank of Britain (IBB), the country's first retail Islamic bank (Ilias, 2009:2). This proves that Islamic banking is also growing in the Europe, where Muslims are considered minority, as Islamic banks or Islamic financial operations are now available in most of the European countries and UK being the leading country. Ilias (2009:4) adds that one of the reasons why Western countries are interested in



Islamic banking is because the industry presents significant new business opportunities, and provides alternate methods for capital formation and economic development.

This chapter presents a review of Islamic banking by making particular reference to service quality as a concept but also as a managerial reality in the Islamic banking. The chapter is divided into six sections. Following introduction in Section 3.1 is Section 3.2, which provides information about the principles and instruments of Islamic banking. Section 3.3 elaborates about the measuring service quality of Islamic banks. Section 3.4 discusses the dimensions and models of service quality in Islamic banks, while Section 3.5 presents the empirical results related to service quality of Islamic banks. The summary and conclusion is presented in Section 3.6.

### **3.2 PRINCIPLES AND INSTRUMENTS OF ISLAMIC BANKING**

Islam is a comprehensive religion, which has implication for all features of life, from the way of life to worship, and from moral and ethical values to socio-economic issues (Usmani, 2009). Islamic banking and finance has is a result of Islamic injunctions in relations to everyday dealing with economy, business and finance.

The term ‘Islamic banking’ means the conduct of banking operations is in line with the guidance of Islamic teaching, which is known as *Shari’ah* law. The *Shari’ah* law which governs the operations of Islamic banks comes from four sources, namely the *Qur’an*, *hadith*, *ijma’* and *qiyas*. While the *Qur’an* and *hadith* are the primary source of *Shari’ah*, both *ijma’* and *qiyas* are considered secondary and only applied when no solution on the matter in question neither found in the *Qur’an* nor *hadith* (Haron and Shanmugam, 1997:86). Accordingly, the philosophies of Islamic banking and finance are derived from the *Qur’an* and *hadith*. There are many verses in the *Qur’an* indicating the principles used as guidance for the Islamic banks in their operational affairs (Haron and Shanmugam, 1997:35).

In terms of entrepreneurship, Islam highly encourages involving in a business subject to honesty, fairness, justice and Islamic principles. Individual Muslims are required to engage in a legitimate and lawful business as defined by *Shari’ah*, and fulfill all obligations and responsibilities accordingly. Furthermore, Islam perceives trade as an honest effort, and earnest endeavor and a human striving for earning one’s rightful

livelihood. Hence, trade manipulations and malpractices aim at earning unfair profit are not considered to be an honest trade. In addition, Islamic entrepreneurs, including Islamic banks, have both profit and social obligations as their goals. Hence, wealth must be used in a proper and orderly manner; supporting development, corporate social responsibility and human development.

In line with such principles, thus, in dealing with customers, Islamic banks are expected to conduct the transactions for the benefits of both (the banks as well as the customers) and uphold the concept of justice, which is evidenced in the *Qur'an* (4: 135).

It should be noted that Islamic economic and financial system aims to ensure individual liberty, freedom of choice, private property and enterprise as well as it seeks to provide effective moral filters at different levels of life and activity (Asutay, 2009). Thus, among the most important teachings of Islam is to establish justice and eliminate exploitation in business transactions. This is done by the prohibition of all sources of unfairness enrichment. One of the important sources of unjustified earning is receiving any financial advantage in business dealings without giving a just counter value such as interest (Mika'ilu, 1989).

The crucial prohibition in Islamic banking and finance is payment and receipt of *riba* (interest/usury) at a fixed or predetermined rate, *maysir* (gambling), *gharar* (speculation), fraud, exploitation and extortion (Asutay, 2009; Chapra, 2008b; Damak *et al.*, 2009; Khan, 2009; Usmani, 2009). Hence, the restriction of certain sources of earnings is particularly a distinctive plank that distinguished the Islamic economic system from the conventional financial system (Asutay, 2009).

The prohibition of usury in the Islamic banking system is only one part of the Islamic economic principles. As an Islamic business institution, all Islamic banks not only have to run their business to achieve their goal of making profit, but at the same time, they are expected to adhere to the rules and laws of *Shari'ah*, which serves as the foundation for Islamic banks that requires them to uphold justice, equity and fairness in managing their business affairs.

As regards to the prohibition of interest, Usmani (2010) states that the philosophical basis of the prohibition of interest is because usury or interest transactions are a form

of trading in money itself; where there is no real commodity involved. It also leads to an inequitable distribution of wealth in society (Amin *et al.*, 2009:214). Interest is charged on lending money only, which is so vehemently prohibited by most of the divine books in general, and by the Holy *Qur'an* in particular (Usmani, 2010:13), as evidenced in the *Qur'an* (see: 2: 275; 2: 276; 2: 278-279; 3: 310; and 30: 39).

The *Qur'anic* position, hence, is that it is compulsory for Muslims and they are strongly advised not to deal in *riba*. The purport is that any profit sought by Muslims should be through their own exertion and not through exploitation or at the expense of others (Haron and Shanmugam, 1997:47). As a consequence, due to the prohibition of *riba*, all transactions related to interest are not allowed. These transactions include the interest-based loans, discounting of receivables, trade of debts with profit, and trade of all interest-based securities.

Islamic moral economy has implications for the nature of business and financial transactions, as certain sectors and economic activities are not considered lawful; such as companies producing tobacco, alcohol, drugs, weapon, or engaged in the business of gambling, casinos, nightclubs and prostitution are also not allowed. These transactions are considered *haram* (unlawful) because they can affect human health and instigate moral problems.

The Islamic financial system based on the *Qur'anic* concept of social justice, is not merely eliminating the element of *riba* but also adopting the Islamic principles such as social welfare (Dusuki and Abdullah, 2007), *Shari'ah* laws, procedures and instruments which help in the maintenance and dispensation of justice, equity and fairness for all. In addition, *Shari'ah* also requires the Islamic business and financial institutions to ensure Corporate Social Responsibility (CSR) (Dusuki and Abdullah, 2007) and ethical compliance (Usmani, 2009). Islamic finance is expected to be a complete financial system, which allows profit earning without neglecting its responsibility to society and emphasising justice and fairness. In other words, Islamic banks need to preserve the commercial objectives such as offering viable and competitive products, enhancing product and service quality, maximising profits and minimising cost of operations (Amin *et al.*, 2009:216), but simultaneously, they are expected also contribute to the development of economy and the society. Thus, an equitable share of financial resources mobilised by financial institutions should

become available to the poor to help eliminate poverty, expand employment and self-employment opportunities, and thus, help reduce inequalities of income and wealth.

Beside of the prohibition of *riba*, the Islamic financial system encourages risk sharing, equity based transaction, and stake-taking economic system (Asutay, 2009; Krichene and Mirakhor, 2008). Muslim jurists have recommended various principles to be adopted by Islamic banks in delivering their product and services. These principles are broadly divided into four categories namely, profit-loss sharing, fees or charges based, free service and ancillary principles. Both *mudharabah* (investment through self-employed entrepreneur) and *musharakah* (partnership) are considered profit-loss sharing principles, whereas principles such as *murabahah* (cost-plus financing), *bai' mua'jjal* (deferred payment), *ijarah* (leasing), and *ijarah wal-iktina'* (hire-purchase) fall within the fee based category. It should be noted that the instrument of *qard hassan* (benevolent loan) is the only free service principle. On the other hand, *wadiah* (trusteeship) and *rahn* (pawn) are the principles in the ancillary category (Haron and Shanmugam, 1997:87).

Recently, the new Islamic financial product, such as *sukuk* (Islamic bonds), has been playing a key role in facilitating economic development. It is used mainly for mobilising long-term funds for financing large-scale investment projects, and therefore, the *sukuk* market is seen as an important avenue to mobilise the necessary funds for macro-economic development (Sairally, 2007:21). In addition, Ilyas (2009:3) affirms that although the *sukuk* market is small in comparison to market for conventional bonds, it is one of the world's fastest growing financial instruments prior to the recent slowdown.

Like conventional banks, Islamic banks also have deposit facilities, where the depositors are allowed to withdraw their funds at any time without any notice. In most cases, Islamic banks would guarantee to return the deposited amount, however, no return on deposit is promised (Haron and Shanmugam, 1997:106). Nevertheless, some of the Islamic banks do give *hibah* (gift) to its depositor as some kind of return on deposit. However, the *hibah* is not compulsory for the bank to give (to customers). The banks would link the returns on deposit with the returns on asset. The linking of the returns on deposits with returns on assets of an Islamic bank serves as a disciplinary device and increases the efficiency of the bank. It also serves as a

stabilisation device saving the banks from deposit runs in crisis situation (Ali, 2003). Furthermore, according to this prohibition of *gharar* and *maysir*, transactions such as short-selling and exotic derivatives (*e.g.* Credit Default Swap) are not permitted (Khan, 2009).

In addition, Islamic finance discourages risk transfer and debt-based system. According to Chapra (2004), there is a close connection between easy availability of credit, macroeconomic disparity, and financial instability. The easy accessibility of credit makes it feasible for the public sector to have high debt profile, and for the private sector to live beyond its mean and to have a high leverage. If the debt is not used efficiently, the ability to pay the debt does not rise in proportion to the debt and leads to debt crises (Chapra, 2004). Debt must relate to purchase and sale and it must link with the real economy. In the case of debt swap such as in Credit Default Swap (CDS), it contains a *gharar* element. Thus, the sale of debt is also prohibited in Islam. Moreover, transaction in Islamic finance should have linkage to the real economy. All financial deals must be asset-backed. This is also to prevent inverted “pyramid of debt” beyond the asset value (Khan, 2009).

As a responsible and embedded financing instrument, Islamic finance aims at higher reliance on equity financing. However, greater reliance on equity does not necessarily mean that debt financing is ruled out. While debt (and its sale) is important, it should not be promoted for non-essential and wasteful consumption and unproductive speculation. Hence, the Islamic financial system does not allow the creation of debt through direct lending and borrowing. It rather requires the creation of debt through sale-and-lease-based modes of financing (Chapra, 2008a).

In practice, all these means that instead of giving normal loans, Islamic banks use PLS arrangements, purchase and resale of goods and services, and the provision of services for fees form as the basis of contracts (Heiko and Cihak, 2008). Only with risk and reward sharing such as in PLS, will avoid the element of *gharar* (uncertainty) and *maysir* (speculation) in contracts. Furthermore, Islamic banks are not allowed to trade debt and involved in direct financing as the nature of the Islamic bank is normally to safekeeping and investment.

As mentioned above, Islamic finance sector has shown unprecedented growth since mid-1990s. The average annual growth rate of Islamic financial institutions assets

during the 1995-2010 period is estimated to have been 10-15% (Khan, 2010). Today, more than 500 Islamic banking and finance institutions are operating worldwide (The Banker, 2011), and are claimed to manage assets worth no less than US\$950 billion.

According to Asutay (2010), Islamic banking and finance aims to achieve the aspirational objectives such as community banking (serving communities, not market) and responsible finance (as it builds systematic checks on financial providers; restrains consumer indebtedness; promote ethical investment and corporate social responsibility initiatives). However, a critical examination on the above objectives indicates that the realities are far from fulfilling these objectives (Asutay, 2010).

Although the early practices of Islamic finance and the emphasis in the Islamic economic theory is on economic development, the general perception is that Islamic banks are lacking in their involvement in community development (Sairally, 2007:22). Therefore, the divergence between the realities of Islamic finance and aspirations of Islamic moral economy is an important debate in various circles in recent times (Asutay, 2012).

Thus, the failure of Islamic banks to develop more risk sharing mechanisms and mirror conventional finance by adopting interest-like fixed return instruments is often seen as a social failure of Islamic finance to deliver its original promise of institutionalising an innovative financial system to instigate social and economic benefits to the Islamic world. The tendency for Islamic banks to overlook the socio-economic agenda is commonly explained by the early stage of development that Islamic banks are at the mixed banking systems environment in which they operate where their survival rests on how successfully they compete with their mainstream counterparts; and the many challenges specifically faced by the banks in term of the legal and regulatory framework, political and economic climate, and lack of human infrastructure.

Therefore, Islamic banking should be concerned with much more than just abstaining itself from charging *riba* in its daily operations (Shariff, 2010:16). It is a system that aspires at making a positive involvement to the fulfillment of the socio-economic objectives of Islamic society as inscribed in *Maqasid Al-Shari'ah* (Dusuki, 2008). However, Zaman and Asutay (2009) argue that the Islamic banking and finance fails to adhere to one of the *Maqasid Al-Shari'ah* which is to safeguard the wealth of the

people. This is on the ground that the practice of Islamic banks is economically not feasible. They further explain that the Islamic bank approach leads to products being more costly, and even less accessible to those in need.

Moreover, it failed to live up to expectations in terms of providing the uplift in human welfare as it promised (Zaman and Asutay, 2009:89). Thus, as a business entity established within the domain of *Shari'ah*, Islamic banks are expected to fulfill the Islamic economic objectives (*Maqasid Al-Shari'ah*) which is to ensure that wealth is fairly circulated among as many as possible without causing any harm to those who acquired it lawfully (Dusuki, 2008:55).

### **3.3 MEASURING SERVICE QUALITY OF ISLAMIC BANKS**

After discussing and presenting the principles and instruments of Islamic finance and banking, this section aims to discuss various aspects of service quality provisions in Islamic banking. The ethical foundation of Islamic finance, as stated, requires that business conduct should be in line with the identified principles of *Shari'ah* but also moral principles of Islam. Thus, quality service provision is an important part of such a paradigm. This section, hence, discusses the concept and also presents the service quality measurement in Islamic banking.

#### **3.3.1 Definition of Quality from the Islamic Perspective: Concept of *Itqan***

From the Islamic perspective, some researchers argue that the concept of quality has its roots in Islamic sources, which defines quality as *Itqan*, meaning to arrange and dispose of things in an artistic and best manner in order to obtain the perfect result or high quality. In addition, in Islamic doctrine, the goal of achieving perfection is sometimes considered to be a form of duty towards society (Al-Zaabi, 2006). Furthermore, Muslims are required to carry out diligent and perfect work in everything they do as they are considered as the vicegerents of Allah on this world, as stated in the *Qur'an* (2: 30). Thus, God made man His vicegerents so that they fulfill their mission of vicegerency by constructing, producing, creating, reflecting and manufacturing in compliance with one's duties and obligations towards his Creator. It is a vicegerency based in essence on excellent workmanship, perfection, and creativity and free from chaos. The perfection is result from continued discipline and diligence.

Hence, only with perfection, one can achieve a satisfying and rewarding piece of work.

In fact, *Qur'an* ascertains and stipulates quality and creativity as stated in the *Qur'an* (2: 117). In addition, Islam calls for quality and creativity (*Qur'an*, 67:3' 27: 88). Furthermore, reported from Al-Thabrani that the Prophet Muhammad (*pbuh*) stated that "Allah loves to see one's job done at the level of Itqan" (Al-Dimasqi, 2006).

Islam, hence, is most certainly requires quality in full scope, in its wholeness with its tenets and canonical laws. Since the operation of Islamic banks derives from the Islamic law (*Shari'ah*), for Islamic banks, their products and services are expected to be of high quality by customers because in Islam, work and the quality of that work, are considered to be a type of worship.

### **3.3.2 The Need of Service Quality and Performance Evaluation System for Islamic Banks**

As stated through Islamic ontology, it is crucial for Islamic banks to have an excellent service quality as part of their internal self-regulating system, which is not an optional matter for them. Most studies consider service quality an essential strategy for success and survival for any organisations (Parasuraman *et al.*, 1985; Zeithaml *et al.*, 1990) including Islamic banking institutions (Othman and Owen, 2002:1). Such an objective will help Islamic banks to improve ways of providing products and services to their customers. Furthermore, it will equip the Islamic banks in coping with the strong competition from conventional banks and new arrivals to the market (Othman and Owen, 2002:2). Similarly, service quality will lead to the growth of the Islamic banking system.

Banks in a particular society exist to reflect the business practices of that society; they have little use otherwise. It is reasonable to suggest that each culture should develop its own banking system for the accomplishment of its own needs. As such, banking practices in Islamic societies are likely to reflect the Islamic banking contracts and business practices.

The need for service quality for Islamic banks is not very different from the need for service quality in any conventional banks. Service quality currently tends to play an



important role in many service industries as it is considered crucial to incorporate profitability and survival of the financial institutions. Service quality in Islamic banks is important, because of its apparent relationship to costs, profitability, customer satisfaction, customer retention and positive words of mouth. In order to achieve customers' satisfaction, delivering high service quality alone is inadequate, and Islamic banks should shape the customers' expectations as well (Othman and Owen, 2005). In other words, they should establish 'quality culture' inside the banks.

Furthermore, it is argued by Othman and Owen (2001) that the measuring and evaluation of service quality in banking, including Islamic banks has become more crucial because of the transformations in the banking environment. Banking has turned out to be globally integrated; hence, there is high competition among the Islamic banks and the conventional ones. Nevertheless, it is significant for Islamic banks to be aware of what and how they will offer the products and services, and how their customers perceive the products and services.

The need for excellent service quality becomes urgent for Islamic banks as the Islamic societies attempt to follow Islamic principles in their everyday transaction especially in business and banking. Thus, it is important for these banks to incorporate a better quality service, which is specially adapted to Islamic expectations (Shariff, 2012:8). Although the need of service quality for Islamic banks is very obvious, this does not mean that Islamic banks must produce complete sets of new quality service concepts. The existing models can continue to be applicable, as long as it does not contradict the requirements of the *Shari'ah*.

Similar to the conventional banking system, the major goals of service quality measurement and evaluation in Islamic banks are to ensure higher customer satisfaction and enhance customer loyalty. Banks that excel in quality service have distinct marketing edge since improved levels of service quality are related to higher revenues, increased cross-sell ratios, higher customer retention and expanded market shares. This is because satisfied customers lead to customer loyalty that translates into a higher profit (Kumar *et al.*, 2009:212). Another goal is to promote competition among the Islamic financial institutions, which will lead to the growth of these institutions.

### **3.4 DIMENSIONS AND MODELS OF SERVICE QUALITY IN ISLAMIC BANKS**

After essentialising quality in general and service quality in particular for Islamic business and financial institutions, this section aims to discuss the conceptualization and modelling of service quality measurement in Islamic banks by referring to the existing body of knowledge.

#### **3.4.1 Othman and Owen's Model**

In the last few decades, researchers have acknowledged the need to create suitable and precise measures of service quality to enhance the service industry. SERVQUAL has indeed proved to be the most accepted method because it offers technological techniques for measuring (Othman and Owen, 2001:9). However, measuring service quality has been developed to face most critics. This is based on the fact that because of the different studies in different service categories, such as banking, telephone services, dentistry, fast food, dry cleaning and credit cards companies, researchers have identified SERVQUAL dimensions on the bases of the firm's culture, products and services, technology and environment.

Othman and Owen (2001:9) introduced the alternative measures of service quality by developing the earlier models (such as Parasuraman *et al.*, 1985), namely CARTER Model for Islamic Banks. The CARTER model which is based on SERVQUAL has six dimensions: (i) compliance with Islamic law; (ii) assurance; (iii) reliability; (iv) tangible; (v) empathy; and (vi) responsiveness. An additional dimension for service quality in the Islamic banking industry is proposed because of the existence of cultural differences between countries, regions, religions or ethnic groups which reinforce the importance of building new dimensions. Thus, Islamic banks' internal and external environment and culture have guided the researchers to add a new dimension called 'compliance with Islamic law'. This dimension includes items such as 'run on Islamic law and principles', 'no interest paid or taken on savings and loans', 'provision of Islamic products and services', 'provision of free interest loans' and 'provision of profit sharing investment products'.

Othman and Owen (2001) linked service quality to customer satisfaction and customer loyalty, reporting that a satisfied customer will be loyal to the organisation,

which is a measure for organisational performance. CARTER includes 34 items across six dimensions. It should be noted that CARTER is among the most well-known model in Islamic banking related to service quality research and has been implemented in many subsequent studies on Islamic banks in different countries (for example Shafie *et al.*, 2004; Tahir *et al.*, 2007). Nevertheless, these studies on service quality in Islamic banks have tended to be carried out in eastern and predominantly, Muslim-based countries (Abdullrahim, 2010).

### **3.4.2 Jabnoun and Khalifa's Model**

Jabnoun and Khalifa (2005) argue that the concerns of service quality may vary from one state to another. It is, therefore, essential to develop measures of service quality that are applicable to the country and culture where the service is offered. Thus, their study proposes developing a measure of service quality in the UAE, and then testing this measure in UAE conventional and Islamic banks.

Their components of service quality were developed through a brain storming and sorting exercise. They asked 15 managers taking a total quality management (TQM) course in an MBA program at the University of Sharjah to carry out a brainstorming exercise to determine the basis of service quality. The exercise resulted in the five dimensions of SERVQUAL in addition to two other new dimensions that are labeled as 'values' and 'image'. They then developed a 30-item questionnaire which includes five items of reliability, three items of responsiveness, four items of empathy, four items of assurance, and five items of tangibles, six items of values and three items of image.

Jabnoun and Khalifa (2005) argue that issues such as image and the extent to which the services of an organisation fit the values of customers have not been addressed in any research on service quality. The significance of values as determinant of service quality can be attributed to customers' craves for psychic needs satisfaction. Another explanation of the importance of values in judging the level of service quality comes from the means-ends models of customer value. These models are based on the assumption that customers acquire and use products or services to accomplish favorable ends.

They also argue that the link between image and service quality has not been clearly established in the literature. However, in markets where imitation is out of control and in which there is slight differentiation if any, it is improbable for ordinary consumers to find it easy to assess the quality of the services they receive (Jabnoun and Khalifa, 2005a). In this case, they suggest that the customers may need some type of strategies for what is good, acceptable, or expected. Consequently, image and reputation can act as norm or expectation setter.

They provide some explanation on the influence of advertising on how and what consumers learn from service experience when consumers saw ambiguous evidence about quality. Their research showed that the advertising had dramatic effects on perception of quality as consumers used advertisements as tentative conjectures about product (or service) performance, and product search and experience provided them the opportunity to evaluate the credibility of these advertisements. Therefore, they suggest that a brand will have a perception of overall quality.

Jabnoun and Khalifa (2005) further state that reputation and brand name are created on the capacity to convey continuously on promises, and as such, they operate as extrinsic indication in evaluating service quality, especially when intrinsic indication fail to differentiate the level of service quality of one service provider from another. Thus, brand reputation and image may play an imperative role as differentiator in the mind of the customer who may highly appreciate the services received from a reputable organisation (Jabnoun and Khalifa, 2005).

### **3.4.3 Al-Zaabi's Model**

Al-Zaabi (2006) used the modified SERVQUAL model to measure customers' perceptions of the level of service quality in the UAE Islamic banks, who rationalised the choice of the model through its wide use by researchers in many industrial and services areas internationally and is a well documented model.

Al-Zaabi's hypothesised model is a causal construct consisting of perceived Islamic banking services, which consist of a number of variables resulting from the current literature, in which studies have clearly recognised the influence of Islamic banking variables on the creation of a customer's perception of service quality in Islamic banks (Al-Zaabi, 2006).

In his model, Al-Zaabi includes the variables that have a direct effect on the perception of the other five dimensions of the SERVQUAL model. These variables are *Shari'ah* compliance in Islamic banking services and products, competitive fees, competitive finance rates, availability of profit and loss sharing finance, employees' awareness of Islamic banking, the financial performance of Islamic banks that is reflected in the return on customers' investment accounts, the availability of banking services and the trustworthiness of the *Shari'ah* board in an Islamic bank.

#### **3.4.4 Abdullahrahim's Model**

Abdullahrahim's (2010) study has adapted SERVQUAL and CARTER to develop a service quality measurement model for the English Islamic banking industry (EIBSQ) using the importance of English Muslims' requirements to measure customer satisfaction. Her study emphasises the cultural dimension as an important factor in service quality.

Her study used the multidimensional instrument developed mainly by Parasuraman *et al.* (1985; 1988;1990; 1991; 1993; 1994) and Othman and Owen (2001) as a guide to develop the measurement of service quality variables in this study. The study employed a focus group and the analysis from the focus group results identified new items of Islamic service quality variables, giving 34 items used in developing SERVQUAL variables for English Islamic banks.

The items used in the study measured the respondents' attributed importance, expectations, and perceptions using a 5-point Likert scale (Abdullahrahim, 2010:81) and are categorised into seven operational groups:

- (i) Service is measured using four items: bank operates according to Islamic Law, wide range of Islamic products (*e.g.* Islamic mortgage, Islamic current account), wide range of services (*e.g.* financial advisor), and low service charges with four questions.
- (ii) Convenience is measured using three items: convenient bank location, number of cash machines available, convenient opening hours with three questions.
- (iii) Efficiency is measured using four items: short waiting time in bank, bank resolves the problem quickly, speed of transactions, efficient transactions, with four questions.

(iv) Communication is measured using three items; clear communication (*e.g.* clear statement, clear explanation and answers), accurate bank statement, and easy bank to deal with, using three questions.

(v) Employees are measured using five items: employees give you individual attention, friendly employees, polite employees, knowledgeable employees, helpful employees with five questions.

(vi) Security is measured using eight items: bank size, well known bank, bank reputation, secure banking, confidentiality of customer information, safe from political action, confidence in bank's management, confidence in bank's *Shari'ah* advisors, with eight questions.

(vii) Physical attributes are measured using seven items: bank has modern-looking equipment, bank's building has Islamic architecture, separate department or counters for ladies, bank has a prayer room, bank has an Islamic appearance, female staff wears *hijab* (scarf), closing for Friday prayer time with seven questions.

### **3.5 SURVEYING EMPIRICAL STUDIES ON SERVICE QUALITY IN ISLAMIC BANKING**

The previous section presented the available models used in the literature in relation to gauging the service quality for the services offered by Islamic banks. This section aims to survey the available body of empirical research by focusing on service quality studies in the case of Islamic banks from different parts of the world.

In Bahrain, Metawa and Almossawi (1998) conducted a study to investigate the banking behavior of Islamic bank customers. A comprehensive profile analysis and a series of chi-square tests were conducted to reveal key characteristics and pattern (Metawa and Almossawi, 1998). They concluded that the most important factor in determining the attitudes of Islamic bank customers was religion followed by the rate of return. In addition, most of Bahraini customers were satisfied with the products/services they used, with the investment accounts receiving the highest score. On the other hand, complex Islamic financing scheme was considered the lowest satisfaction due to the relatively high cost.

Naser *et al.*(1999) attempted to assess the degree of customer's awareness and satisfaction towards an Islamic bank in Jordan. A sample of 206 respondents participated in their study. The finding revealed a certain degree of satisfaction on most of the Islamic bank's facilities and products (Naser *et al.*, 1999). They further elaborated that although the respondents indicated that they are aware of a number of specific Islamic financial products like *murabahah*, *musharakah* and *mudharabah*, the finding shows that they do not use it.

Othman and Owen (2002) introduced the alternative measures of service quality (CARTER Model for Islamic Banks) and used Kuwait Finance House (KFH) as a case study. They added a new dimension called 'Compliance with Islamic Law' to the SERVQUAL model. This study, however, they proposed a new model to measure service quality, called CARTER. All CARTER items have appeared in both important items' weights and percentages were significant. There is a strong link between service quality and customer satisfaction. The study also suggests a scenario plan for KFH to adopt service quality (Othman and Owen, 2002).

Shafie *et al.* (2004) applied the CARTER model to measure the perceptions of the Malaysian Islamic bank's retail customers. Their study is a replication of an earlier study by Othman and Owen (2001) using a questionnaire survey. The result showed significant validity for all CARTER's 35 items and six dimensions in terms of their importance in both weights and percentage. The compliance dimension was reported to be the most important by Bank Islam Malaysia Berhad's (BIMB) customers, while empathy and tangible dimensions were the least important. Their result also indicated that BIMB is doing well in satisfying its customers, however, the bank should build quality culture by adapting a quality system in its managerial and operational sides if it is to sustain this competitive edge (Shafie *et al.*, 2004).

A number of similar studies were subsequently undertaken in a variety of contexts. Jabnoun and Khalifa (2005) sampled 115 respondents from Islamic banks and 115 respondents from conventional banks in their study to develop a measure of service quality in the UAE and then testing this measure in UAE conventional and Islamic banks. They developed a 30-item questionnaire comprising five dimensions of SERVQUAL and two other dimensions called values and image (Jabnoun and Khalifa, 2005). The result of their study revealed that all dimensions (personal skills,

reliability, values and image) were significant in determining service quality in conventional banks. On the contrary, only personal skill and values were significant in determining service quality in Islamic banks.

Al-Zaabi (2006) also measured the perceived level of service quality in the UAE Islamic banks, using a modified SERVQUAL model. The study attempted to determine the extent of the correlation and relationship that might exist between the service quality dimensions and Islamic banking variables in one hand, and between these and the independent variables on the other. He concluded that the Islamic banks' service quality model used in his study proved to be reliable and viable to measure the perceived service quality in Islamic banks. In addition, a high quality banking services will result in high profitability, customer loyalty, and steady growth (Al-Zaabi, 2006).

Another study conducted in Malaysia was by Tahir and Bakar (2007), who investigated the level of service quality of commercial banks from the perspective of bank customers. A questionnaire survey comprising of 300 respondents in the East Coast region of Malaysia was used. Their study used SERVQUAL model and a descriptive statistic analysis to evaluate the level of service quality of Malaysia's commercial banks from the respondents' perspective. They examined the service quality gap by comparing the customers' expectations and their actual perceptions, who found that service provided by the commercial banks was below customers' expectations, and responsiveness was rated as the most important dimension followed by reliability, tangibility, assurance and empathy. Furthermore, they also found that customers were slightly satisfied with the overall service quality of the banks (Tahir and Bakar, 2007).

Rashid *et al.* (2008) investigated the quality perception of the customers towards domestic Islamic banks in Bangladesh. They highlighted the importance of CARTER model in their study. A factor analysis was conducted to identify important factors rationalising customer satisfaction with Islamic banking services. Their finding revealed that alongside religion, factors like depositors' desire to achieve higher return, convenient financial transaction system, and consistency in service with uniformity, and higher cost-benefit implications were imperative to customers for choosing their intended service. Nevertheless, they stated that most of the customers are still out of the horizon of Islamic knowledge. Thus, difficulty in understanding



Islamic economics deters the customers to approach Islamic banks. They suggested that effective marketing programs along with investors' education programmes must be there to create awareness for Islamic banking.

Amin and Isa (2008) examined the relationship between service quality perception and customers' satisfaction in Malaysian Islamic Banking using the SEM approach. They used SERVQUAL measurement scales consisting of 6 dimensions (tangibles, reliability, responsiveness, assurance, and empathy, plus the compliance dimensions to measure Malaysian Islamic banking service quality). Their result indicated that the proportion of the Malaysian Muslims' awareness of the Islamic banking products and services were higher compared to non-Muslim customers. A majority of the Islamic banking customers were satisfied with the overall service quality provided by their banks. The findings suggested that the standard model of Islamic banking service quality dimensions should consist of the six dimensions and good determinants of satisfaction. The relationship between service quality and customer satisfaction was significant (Amin and Isa, 2008).

An empirical literature review of the comparatively few studies of attitudes, perceptions and knowledge of Islamic methods of finance was conducted by Gait and Worthington (2008). They used a synoptic survey of empirical analyses about financial products and services and comparison with the literature on conventional financial services and products. Their study revealed that while religious conviction is a key factor in the use of Islamic finance, customers also consider bank reputation, service quality and pricing as being of relevance (Gait and Worthington, 2008). They further highlighted that there is also interest among financial institutions in supplying Islamic financial products and services, but this is mitigated by complications with firm management and a lack of familiarity with business conditions.

Hossain and Leo (2009) focused their study on customers in retail banking in the Middle East in general and Qatar, in particular. Their study evaluated the customers' perception regarding service quality of four Qatari banks, *i.e.* Qatar National Bank, Doha Bank, Qatar International Islamic Bank and Arab Bank using questionnaires survey on a sample size of 120 respondents. Their result indicated that customers' perception was highest in the tangibles area, and lowest in the competence area (Hossain and Leo, 2009:347).

The study by Nuradli (2009) was also related to Islamic banks in Malaysia, who attempted to develop a parsimony customer satisfaction model integrating the elements of technical, and functional service quality, religiosity and cultural factors using a qualitative research. He argued that SERVQUAL model could not be solely applied because the model does not take technical quality, cultural and religiosity into account since the model captures functional quality only. He further noted that Grönroos's (1982) model, which includes both types of technical and functional qualities, will have an overall impact on the image of a company that has high technical specification such as the banking industry. However, he endeavored to integrate the element of religiosity with the service quality, thus CARTER model was deemed suitable for his study. His study employed online semi-structured interviews via emails followed up by a telephone interview via skype and using content analysis method. His study suggested that the service quality dimensions (technical and functional) and religion can become the antecedents for the Islamic credit cards users, while culture can become the moderator between religion and satisfaction in the integrated customer satisfaction model (Nuradli, 2009).

In Kuwait, Al-Eisa and Alhemoud (2009) conducted a study to identify the most salient attribute that influence customer satisfaction with retail banks and determine the level of the overall satisfaction of the customers of these banks. They used a multiple-attribute approach advanced by Shin and Elliott's (2001) to analyse the data collected from a convenient sample of 836 actual customers of retail banks in Kuwait. The approach showed that composite satisfaction scores that incorporated multiple attributes provide diagnostic utility for strategic decision-making which was very useful for managers to determine which attribute could have a critical impact on the overall satisfaction of customers. Their findings showed that the most crucial attributes for predicting customers' satisfaction with the retail banks in Kuwait were fast service, courtesy and helpfulness of employees and availability of self-banking services. In addition, the result also showed that the vast majority of the customers of retail banks in Kuwait (nearly 81 per cent) were either satisfied or very satisfied with the services of their banks (Al-Eisa and Alhemoud, 2009).

Subsequent study also examined perceptions of Islamic banking in Malaysia. The study by Kumar *et al.* (2009) determined the critical factors to accessing the level of service quality of banks by re-examining the SERVQUAL model. They used

‘dominance analysis’ to measure the relative importance of each critical factor in closing up the overall service quality gap of banks. Their sample consisted of 308 bank customers from different parts of Malaysia and the data were collected by using a structured questionnaire. The findings revealed that there were significant differences between the respondents’ expectation and their perceptions. Among the four dimensions tested, tangibility obtained the smallest gap whereas convenience was the largest gap. The application of dominance analysis indicated that competence and convenience together could help reduce the SERVQUAL gap as much as 76%. They concluded that the banking sector needs to become more competent by being more responsive and fulfilling the assurance of the customers and providing the banking facilities more conveniently.

Another study by Kumar *et al.* (2010), aimed to identify the differences in the service quality (if any) between the conventional and Islamic banks in Malaysia using the SERVQUAL model. As before, ‘dominance analysis’ was used to examine the relative importance of the critical factors in closing up the overall service quality gap in these two types of banks. The study used structured questionnaires survey. The findings revealed that the expectations of competence and convenience were significantly different between conventional banks and Islamic banks, whereas the perceptions of tangibility and convenience were found to be significantly different between these two types of banks. The application of dominance analysis in the SERVQUAL model indicated that the difference between these two types of banks was in term of degree and not pattern. Their study found that competence and convenience were found to be relatively more dominating factors in both the types of banks. These dimensions are very much related with human factors such as the ability for banks to understand and give individualised attention, willingness to help customers and provide prompt services (Kumar *et al.*, 2010). They argue that these two dimensions if integrated could help reduce the overall service quality gap to an extent of 72% in the case of conventional banks and 85% in the case of Islamic banks.

Sharif and Mirzaee (2010) conducted a study in Malaysia to compare between Muslims’ and non-Muslims’ satisfaction towards Islamic banks by using SERVQUAL and CARTER models. Their findings showed that by employing CARTER model, Muslims were more satisfied than non-Muslims towards Islamic banks. The reason was that Islamic banks operate under Islamic laws and this issue

was important for Muslims, as they will be more satisfied to deal with Islamic banks. However, by using SERVQUAL model, their finding revealed that there is no significant difference between Muslims' and non-Muslims' satisfaction. They suggested that compliance to Islamic law was an important factor for Muslims' satisfaction.

In Pakistan, a study by Ahmad *et al.* (2010) examined the relationship between service quality and customer satisfaction regarding Islamic banks as well as conventional banks. They also investigated how service quality affected customer satisfaction by assessing the magnitude of the relationship between the selected variables. Their data were collected from 720 bank customers by using a stratified random sampling. A modified version of SERVQUAL model was used in the structured questionnaire survey. Their findings revealed that there was a strong positive relationship between service quality and customer satisfaction both for Islamic and conventional banks. Furthermore, there was a stronger positive relationship between service quality and customer satisfaction in Islamic banks as compared to conventional ones in Pakistan (Ahmad *et al.*, 2010).

Hence, drawing from the above literature survey, the available number of research on the subject and in particular in case of Malaysia is limited, which rationalise this particular study. By expanding the total number of surveys to include more banks, this research could provide additional insight into the Islamic banking service quality and customer satisfaction. Furthermore, there is hardly any study, which measures and compares the service quality of Islamic banks with the conventional ones in Malaysia, which has a bigger sample size and wider representation. Thus, this study makes an attempt to develop the modified SERVQUAL model in the Malaysian banking sector. In addition, this study examines the gap between customers' expectations and their perceptions.

### **3.6 SUMMARY AND CONCLUSION**

This chapter comprehensively discussed the principle of Islamic banking and service quality of Islamic banks. Subsequently, the chapter also discussed the service quality from Islamic perspective, dimensions and models of service quality used in Islamic banks, and empirical studies on service quality of Islamic banks. The overall information and discussion that have been presented in this chapter should be able to

provide the readers with essential knowledge of Islamic banking, service quality management in Islamic banks and also the issues surrounding it.

In conclusion, Islamic banks should manage their service quality effectively in order to be translated into marketing strategy and organisational development. This step is very crucial if they want to achieve a competitive edge over their rivals. It is expected that the empirical nature of this study, as developed in the following chapters, can contribute to this and can fill the identified gap.

## Chapter 4

### Islamic Banking in Malaysia

#### 4.1 INTRODUCTION

The first Islamic bank as a modern banking institution was established in 1983; however, the history of Islamic finance in Malaysia can be traced back to 1962 which marked the institutionalisation of first Islamic financing institute. Over the years, Malaysia has successfully managed to become a main centre for Islamic banking and finance claiming the 25% of the total financial activity in the country. In Malaysia, in addition to establishment of many Islamic banks, more conventional banks have developed strategies in the form of Islamic windows to participate and offer *Shari'ah* compliant banking products and services. Despite such developments, our knowledge of customer rationale for choosing Islamic versus conventional banking services is still not based on robust foundations.

In order to understand the development trajectories of Islamic banking in Malaysia, it is an imperative to conduct research on customers' perception of patronage factors and service quality of Islamic and conventional banks in Malaysia. As the capability of the banking institutions to secure a substantial market share is dependent on the strategic positioning of the banks to retain their competitive advantage and offer services and products that satisfy their customers' need (Dusuki, 2008b: 72). In this regard, as market players in the banking sector, there is a demand for information on Islamic and conventional banks' service quality management.

This chapter, hence, aims to examine the nature of Islamic banking in Malaysia. In doing so, this chapter commences with the development of Islamic banking in Malaysia, before highlighting the issues related to Islamic banks in Malaysia. The chapter is organized into four sections. Following the introduction in Section 4.1 is Section 4.2, which offers information relating to the development of Islamic banking in Malaysia. Subsequently, Section 4.3 discusses on issues related to Islamic banks in Malaysia. This section examines customers' awareness and knowledge on products

and service as well as banking selection process. Finally, section 4.4 concludes the significant points of the chapter.

## **4.2 DEVELOPMENT OF ISLAMIC BANKING IN MALAYSIA**

### **4.2.1 History of Islamic Banking in Malaysia**

The initiation of Islamic banking and finance can be traced back to the establishment of Tabung Haji in 1962 which is a savings institution with a purpose to invest the savings of the potential pilgrims aiming to travel to Makkah and Medina in Saudi Arabia for pilgrimage. It has functioned to invest the savings according to the *Shari'ah* principle (Marimuthu *et al.*, 2010:52; Chong and Liu, 2009:130).

Beyond this historical existence, in terms of the history of modern commercial Islamic bank, Malaysia could be categorized as the pioneer in the development of Islamic banking and finance with the establishment of its first Islamic bank, Bank Islam Malaysia Berhad (BIMB) in July 1983. It was a beginning era of Islamic banking with the creation of a full-fledged Islamic banking institution offering financial products and services that are *Shari'ah* compliant (Hassan, 2007) following the enactment of the Islamic Banking Act in April 1983. The act grants Bank Negara Malaysia (BNM), which is the central bank of Malaysia, with authorities to manage and observe Islamic banks throughout Malaysia.

Furthermore, to broaden Islamic banking all over the country in Malaysia, BNM initiated the 'Interest-free Banking Scheme' in March 1993, which permits existing banking institutions to offer Islamic banking services using their existing infrastructure and branch network as Islamic windows (Khattak and Rehman, 2010:662; Chong and Liu, 2009; Hassan, 2007). This strategy was to further boost the Islamic banking sector in Malaysia. The combined efforts from market players and continued encouragements but importantly incentives from the government have expedited the development of the industry. In addition, in October 1999, a second Islamic bank, Bank Muamalat Malaysia Berhad, was established (Hassan, 2007), and three new Islamic bank licenses were released to Islamic financial institutions from the Middle-East in 2004 (Chong and Liu, 2009: 130) to increase the variety and penetration of players in the Islamic financial system. With such proactive market

players and regulators as well as government, Malaysia closed 2011 with 20 Islamic banks.

#### **4.2.2 Islamic Banking System in Malaysia**

Malaysia has dedicated a great commitment in supporting the Islamic banking and finance. Bank Negara Malaysia (BNM), the central bank of the country, was entrusted to assisting and supporting the industry. Innovations and expansions are the most important features of its policy. Consequently, it developed assets, established a regulatory framework, accounting standards, and training facilities to provide skilled manpower for the fast expanding sector. According to Hassan (2007: 114), the policy is having the desired impact.

In fact, Malaysian banking system operates on a dual banking system, whereby, a comprehensive Islamic banking system operating on a parallel basis with the conventional banking system (Haron and Shanmugam, 1997; Ilias, 2009:103). In other words, separate Islamic banking regulations exist side-by-side with those for conventional banks. Additionally, the system is well protected by having an effective legal framework, as well as distinctive players in the banking, capital market and *takaful* sectors.

For instance, the same as in the case of the legal framework for conventional banks, the Islamic Banking Act of 1983 contains comparable requirements on the licensing; financial (capital, reserve, and liquidity) requirements; ownership, control, and management; business restrictions; and supervision of Islamic banks. At the worldwide level, the Islamic Financial Services Board (IFSB), which is the equivalent of the Basel Committee on Banking Supervision for conventional banks, encourages and improves the reliability and stability of the Islamic financial services industry through establishing and regulating the international prudential standards (Chong and Liu, 2009).

#### **4.2.3 The Present State of the Islamic Banking and Finance Industry in Malaysia**

Malaysia is now classified as a global hub for Islamic banking and finance sector. The success and contribution of Malaysia in developing the Islamic banking and finance



industry is recognized globally. Today, Malaysia has the most developed Islamic financial sector in the world that operates side-by-side with a conventional-banking system (Chong and Liu, 2009:30). As one of the countries that has the most active and developed Islamic banking sector in the world, Malaysia tries to achieve sustainable growth for the Islamic banking industry, where it currently plays a significant role in the economy, making up one of the biggest provider of financial services in the Malaysian economy.

In addition, Islamic banks in Malaysia channel funds from the corporate to the household sector by financing mainly vehicle and residential property purchases (Karwowski, 2009:31). Deferred payment transactions and mark-ups remain the dominant modes of financing (Hassan, 2007:114). Thus, in order for Islamic banks in Malaysia to achieve a sustainable growth, a great concern has to be put in delivering good service quality beyond only relying on the religious loyalties of the customers. By having better service quality, Islamic banks will be able to attract new customers, while maintaining the loyalty of previous customers. All these will lead to more profit, and more profit will subsequently lead to sustainable growth.

Besides the 'Interest-free Banking Scheme', Malaysia has a well-developed Islamic interbank money market, Islamic government debt securities market, and Islamic insurance market (Chong and Liu, 2009: 130). The Islamic interbank money market, set up in January 1994, permits Islamic banking institutions to do business in designated Islamic financial mechanism among themselves. Additionally, the *Mudharabah* Interbank Investments (MII) mechanism, allows an insufficient Islamic banking institution to attain investment from a surplus Islamic banking institution on a *mudharabah* (profit-sharing) basis. Whereas, the Government Investment Issues (GII) market, which was introduced in 1983, is the Islamic equivalent of a conventional Treasury Bill and bond market. Moreover, Islamic insurance, or *takaful*, was established in 1985 to suit the public's need for insurance products that are *Shari'ah*-compliant.

Indeed, an imperative step has been the establishment of the Islamic Capital Market, which has recorded impressive improvement in terms of higher issuances of Islamic papers such *sukuk*. Such developments have enhanced the position of the country as a leading hub for Islamic finance in the world. Currently, there are 20 Islamic financial

institutions (fully fledged Islamic banks and Islamic subsidiaries) operating in Malaysia's banking system, including 10 foreign Islamic banks, which provide a full range of Islamic banking products and services (BNM, 2012). Hence, this shows that Malaysia has a good prospect for Islamic banks to grow extensively, which is why the foreign Islamic banks chose Malaysia to pursue their investment. Even though Islamic banking assets account for less than 25% of total banking assets the market is currently growing and profitable. Nevertheless, competition is rising all over the world.

As highlighted above, Islamic banking sector has performed in an unprecedented manner, which undoubtedly brings about many challenges in various dimensions. In addition, past researchers like Gerald and Cunningham (1997), Haron and Shanmugam (1997), Metawa and Almosawi (1998), Hassan (2007), Dusuki and Abdullah (2007) and Chong and Liu (2009) also highlighted that Islamic banking has several substantial issues that can impair its development.

After presenting the development of Islamic banking in Malaysia, the next section explores and discusses the issues related to Islamic banking in Malaysia through the available empirical studies.

### **4.3 ISSUES RELATED TO ISLAMIC BANKS IN MALAYSIA**

#### **4.3.1 Customers' Awareness and Knowledge of Islamic Banking Products and Services**

The extreme competition that exists in the market for Islamic financial services presents a big trial to the prosperity of Islamic banking organisations. A frequent suggestion is that Islamic retail banks should react to this challenge by making better use of customer awareness techniques, which can help to meet the demands of the competitive market environment (Haron *et al.*, 1994; Ahmad and Haron, 2002). Thus, the idea endeavours to link the gap between diverse customer desires and limited banks resources, by encouraging distinct products and marketing offerings to be improved to suit the requirements of different customer's needs.

Although some of studies in customers' awareness and knowledge of Islamic financial products and services in Malaysia indicate that the level of awareness is acceptably

high, the level of understanding about Islamic banking products is still considered as minimal (Mohd-Karim, 2010: 94). Thus, this section further discusses the findings of the studies that were conducted in Malaysia and other countries

One of the pioneer studies in Malaysia was conducted by Haron *et al.* (1994). In their study, the respondents were Muslim and non-Muslim commercial bank customers in the northern region of Malaysia. Their findings revealed that, although the level of awareness of the existence of Islamic banking was rather high for both categories of customers, nevertheless, the level of knowledge for both was quite low.

Ahmad and Haron (2002) conducted a study in Malaysia by focusing on the perceptions of corporate customers towards Islamic banking system in Malaysia. The respondents were the top management such as financial directors, financial managers and accountants. Their findings suggested that more than 65 % of the respondents indicated that their knowledge in this system was limited. In addition, although the majority of the respondents were non-Muslims, they knew that Muslims were not allowed from patronising conventional banks due to the interest that was prohibited in Islam.

In contrast, Abdullah and Rahman (2007) carried out a different approach when they examined the level of awareness, knowledge, and understanding of Islamic banking and finance (IBF) among bank managers (as opposed to customers) in Malaysia. They asserted that their findings are vital for future human capital development in the Islamic banking industry. The results of the study showed that bank managers possessed a good knowledge of the general principles of IBF and some basic concepts, like *murabahah/bai bithaman ajil*, *qard hasan* and *ijarah*. However, their knowledge of other basic concepts, like *musharakah* and *mudharabah* was only of a moderate level. In addition, the results also point out that the bank managers' knowledge on advanced concepts of IBF such as *ghurmi* (risk) and *gharar* (uncertainty) were quite poor.

There are a number of more recent studies that also endeavour to examine the customers' level of awareness and knowledge on Islamic financial products and services in Malaysia. For example Doraisamy *et al.* (2011) conducted a study on customer preferences for Islamic banking product and services in Sungai Petani. Their results revealed that 79.1 % of the respondents were aware about the Islamic banking

products and services. However, they found that the respondents have no knowledge about the specific Islamic financial products like *murabahah*, *musharakah*, *mudharabah*, *ijarah*, *qard hassan* and *al-ijarah thumma al bai'*. On the other hand, the result also showed that most of the Islamic banking consumers were aware and familiar with *al-wadiah* savings and current account. In another study, Hamid *et al.* (2011) found that there was no significant difference between Malay and Chinese customers in their level of awareness on Islamic home financing products.

Furthermore, Bley and Kuehn (2004) argued that the lack of knowledge of specific Islamic products was in part attributable to the Arabic vocabulary used to identify Islamic financial products and services. Their study conducted in the UAE found out that the non-Arabic speaking respondents had a significantly lower level of knowledge of the Islamic banking products and services as compared to the respondents that were fluent in Arabic. This finding should be paid attention in devising the necessary strategy to overcome the language barrier in accessibility to the services.

In Malaysia, the majority of Islamic banks are keen to use Arabic terminology and name for a new product or brand name, even though Arabic is not the country's main language (Muhamat *et al.*, 2011:344). However, Malaysia is a multicultural society, only a small fraction of the population in Malaysia who can speak, write, and understand well the Arabic language. This should be considered in devising the customer services. However, Muhamat *et al.*'s (2011) findings content this suggestions. They measured the sensitivity of the banks' customers towards the adoption of Arabic terminology in the Islamic banking industry, and they concluded that most of the respondents agree that Arabic terminology gives competitive edge to Islamic banks but at the same time they indicate that the catchy Arabic name will give them difficulty in gaining fast information about the product. Thus, there is a need to resolve this issue, since the non-Muslims are also clients of the Islamic banking industry in Malaysia.

There are also several studies conducted to gauge the level of awareness of Islamic banking products and services in other countries. For example, a study that was conducted in Singapore Gerrard and Cunningham (1997) concluded that most of the Muslims are aware of the fundamental concepts of the Islamic finance. However, they

are not aware of the specific Islamic financial products such as *murabahah*, *ijarah* and *etc.* Nonetheless, that study was conducted in a non-Muslim majority country. On the other hand, Khattak and Rehman (2010) attempted to measure the customers' awareness level towards Islamic banking products in Pakistan. However, their result also showed that the customers have no knowledge about the specific Islamic products such as *murabahah* financing, *ijarah* financing, and *musharakah* financing. It means that Islamic banking industry have to give consideration to promote the Islamic banking products and services to their customers.

It can be summarised from the findings of this brief literature review that the level of awareness of Islamic banking product and services is still low due to the Arabic terminology and the lack of strong understanding and knowledge concerning *Shari'ah* principles governing the Islamic banking. In addition, the lack of knowledge in differentiating the unique features of Islamic banking products and services is not only among the customers but also among the Islamic banks' managers.

Concerning service quality, Islamic banks should take note of people's insufficient knowledge in Islamic banking system into consideration especially when promoting Islamic financial products and services. As asserted by Khattak and Rehman (2010), the Islamic banks have to increase the customers' awareness by arranging certain seminars to inform the Islamic banking customers about different products and services. Islamic banks, therefore, are suggested to revamp their marketing activities accordingly.

#### **4.3.2 Banking Selection Process**

A comprehensive understanding of the salient decisive factor used by customers in patronising a bank should facilitate bankers to construct more accurate, targeted marketing approaches for the bank in order to appeal to a greater number of customers and to better catering to the needs of both existing and would-be customers (Mokhlis, 2009: 19). Furthermore, information such as why people patronise the Islamic bank, why people choose products offered by conventional banks, and how people distinguish products which are offered by both the Islamic and conventional banks are essential to the survival and growth of either types of banks (Haron *et al.*, 1994).

Thus, since the growing success of Islamic banks is notable, a better understanding as to the underlying factors of the patronage is essential for their sustainability in the future. Hence, in the case of Islamic banking in Malaysia, it become obviously important to understand the selection criteria in order for banks to become competitive in the market as the Islamic banks has to compete not only with the advanced conventional banks but also the new-comers to the Islamic banking industry; locally and internationally. Therefore, one of the strategies to attract customers' accounts is by knowing what customers' needs are and to find effective ways to fulfill these needs.

As emphasised by Bley and Kuehn (2004), a better knowledge of the factors that influence these choices can assist the development of appropriate strategies to escalate customers' desire for these products and services. Hence, this study seeks to fill the void in the literature by investigating more carefully the patronage factors that influence the customers to choose Islamic or conventional banks, as well as 'religious obligation' as one of the patronage factor for Islamic banks.

A review of the literature established an ideal reference source of materials and research writing concerning on the theme of the bank selection criteria. These, among other include, Mokhlis (2009); Mokhlis *et al.* (2008), Dusuki (2008b), Bley and Kuehn (2004), Ahmad and Haron (2002), Naser *et al.* (1999), Metawa and Almosawi (1998), Haron *et al.* (1994) and Gerrard and Cunningham (1997). Among the frequent factors employed to determine customers' selection criteria are attractive price of the products offered, service quality, convenience, friends and families influences, friendliness of personnel (Dusuki, 2008b:77; Gerrard and Cunningham, 1997; Haron *et al.*, 1994), location, brand and image, and religious obligation (for the selection of Islamic banking services) (Naser *et al.*, 1999; Metawa and Almosawi, 1998).

Regardless of the argument that Islamic banks' customers choose Islamic bank because of the religious motivation, previous empirical studies found that religious obligation is not the only criterion to patronise Islamic banks. Many of the banking patronage studies identify other factors such as fast and efficient service, friendliness of bank personnel (Haron *et al.*, 1994), ambience and advertising (Gerrard and Cunningham, 1997), cost and benefits (Ahmad and Haron, 2002), and secure feeling

(Mokhlis *et al.*, 2008) as either equally if not more essential factor for the customers in selecting a particular bank.

Haron *et al.* (1994), for example, sought to establish the relative importance of bank patronage factors using Muslims and non-Muslims sample. Twenty-six bank patronage factors were listed in their questionnaire. The three most significant factors in the bank patronage factor for Muslims were: first, 'the provision of a fast and efficient service'; second, 'the speed of transaction', and third, 'friendliness of bank personnel'. Whereas for the non-Muslims, the three most significant factors were: first, 'friendliness of bank personnel', second, 'the provision of a fast and efficient service'; and third, 'the reputation and image of the bank'. Their study concluded that there are no significant differences between Muslims and non-Muslims in their bank selection criteria.

In a similar study, Gerrard and Cunningham (1997) using sample of Muslim and non-Muslims in Singapore, aim to establish the relative importance of certain bank selection criteria. Their questionnaire contained twenty-two bank selection criteria. The factor analysis in their study shows that for both Muslims and non-Muslims, seven factor groups were generated. The three most important factors in the bank selection criteria for Muslims were: first, 'ambience and advertising'; second, 'borrowing/advertising'; and third, 'status'. As for the non-Muslims, the three most important factors were: first, 'ambience/third party influences'; second, 'borrowing/return'; and third, 'service/convenience'. They also stated that Muslims were far more of the opinion that religion and profitability reasons motivate people to deposit monies with an Islamic bank

A study by Ahmad and Haron (2002) explores the perceptions of persons responsible in financial affairs of public listed companies, namely corporation, in Malaysia towards Islamic banking. The study found that the most important factor perceived by corporate customers in selecting their banks is the cost of the services and products. This means that Islamic bank products will not be attractive to this market unless and until its costs are lower than those of the products of the conventional banks. The second important factor was service delivery (fast and efficient), followed by size and reputation of the bank, convenience (location and ample parking), and friendliness of bank personnel.

In addition, a study by Mokhlis *et al.* (2008) conducted in Malaysia, wanted to determine the pertinent factors which undergraduates perceived as germane to their selection of banks and also seek to understand if the group is homogeneous in regard to bank selection criteria employed. The findings of their study reveal that undergraduate students place higher emphasis on secure feelings, ATM service and financial benefits when choosing a bank to patronize.

A study by Dusuki (2008) also conducted in Malaysia, revealed that knowledgeable and competent personnel coupled with friendly and courteous values to be the most important criteria in patronising Islamic banks. The findings of the study suggest that adequate personnel training will boost the quality of Islamic banking staff, which eventually may affect and attract more customers to patronise Islamic banks.

Hence, efficient services, financial rewards and personnel's courtesy are always regarded as excellence service quality by customers. Therefore, banking institutions need to invest in enhancing their service quality strategy in order to appeal to the customers. These results suggest that Islamic banks can no longer rely only on religious factor as a marketing strategy, as banks' customers perceive that service quality and effective services are among the most important factors to patronage a bank.

Furthermore, a study by Haron and Azmi (2005) suggests that there is a possibility that religious belief plays an imperative role in the patronage choice by Islamic banks customers. Their study does seem to uphold the findings by Metawa and Almossawi (1998), Naser *et al.* (1999) and Bley and Kuehn (2004), which argued that religion is a strong driver of individual preferences to patronage a bank.

These studies somehow validate earlier work, which discover that both religion and financial factors are equally vital for customers in patronising Islamic banks. Nonetheless, studies on banking selection of Islamic and conventional banks in Malaysia remain scarce. It is worth noting from the survey discussed above that no relevant published work to date has appeared concerning the comparison of patronage factor for Islamic and conventional banks in Malaysia. Previous research is limited in scope due to limited sample size or restrictive in representation. The present study endeavours to fill this observed gap in the literature through empirical analysis of



banks selection criteria employed by customers of Islamic and conventional banks in Malaysia.

#### **4.4 CONCLUSION**

This chapter presented a brief overview of Islamic banking in Malaysia including the history, the Malaysian Islamic banking system, and the present state of the Islamic banking industry in Malaysia. In addition, the chapter also highlights the issues related to Islamic banks in Malaysia such as the level of awareness on Islamic banking products and services, and the banking selection process. Furthermore, this literature review also helped to identify pertinent research variables and appropriate research methods for this research, which are further elaborated in the research methodology chapter.

## **Chapter 5**

### **Research Methodology and Modelling**

#### **5.1 INTRODUCTION**

The previous chapters thoroughly review literature related to both service quality and Islamic banking with a vision to demonstrate the relevance and significance of service quality issues to the current operation of Islamic banks. This chapter proceeds by explaining the research framework and methodology designed to investigate customers' expectations and perceptions of service quality of Islamic and conventional banks in Malaysia. Therefore, this chapter will briefly discuss the methodology and method that are employed in order to answer the research questions that have been outlined earlier in the introduction chapter (Chapter 1).

This chapter has been organised in eight sections. Section 5.1 briefly describes the chapter. Section 5.2 explains the philosophical framework on which the methodology of this study is built upon. Section 5.3 highlights the variables in this study with the research hypotheses. It also explains how the research constructs were operationalised and the measures used. Subsequently, Section 5.4 presents the research methodology and strategy, while Section 5.5 outlines the research design. Next, Section 5.6 discusses the research methods, which includes the data collection method, sampling process, research instruments, data validity and reliability and data analysis. Accordingly, Section 5.7 concludes the chapter.

#### **5.2 MEASURING CUSTOMERS' EXPECTATION AND PERCEPTION: THE MODELLING**

A complete attitude model of service quality must measure the effects of the importance of individual attributes on expectations and perceptions of service quality. The conceptualisation and measurement of service quality has been an elusive concept primarily because of service intangibility, the troubles associated with simultaneous production and receipt of a service, and the difference between mechanistic and humanistic quality (Carman, 1990:33). In other words, it is difficult

to define and measure ‘quality’ when applied to financial products because they are intangible (Howcroft and Hill, 1992:4).

As discussed in Chapter 2, Parasuraman *et al.* (1985, 1988, 1991 and 1994) made a substantial contribution to the concept of service quality and the factors that influence it by identifying the gaps that can cause quality problems. Recalling the discussion in Chapter 2, they suggested a 22-item scale, called SERVQUAL, which have 5 dimensions: ‘tangibles’, ‘reliability’, ‘responsiveness’, ‘assurance’, and ‘empathy’.

Instead of replicating the Parasuraman *et al.* model as it is, this study aims to modify it to fit to the particular research questions raised by this study. In other words, while it may be more appropriate as a next step to do more replication and testing of the SERVQUAL dimensions that can be used in any retailing or service situation (Carman, 1990:34), replication needs not be an exact duplication of a previous study, it is also useful and powerful to consider additional factors in the design (Carman, 1990:35). Thus, this is the approach taken in this study.

Since the use of SERVQUAL has become increasingly popular in the service and marketing literature, for instance Parasuraman *et al.* (1990), Liljander and Strandvik (1995), Jabnoun and Khalifa (2005), Al-Zaabi (2006), and Al-Adwani (2010), therefore, this study will use SERVQUAL model as the basis of measurement method with some modifications to the original model in order to measure the customers’ expectation and perceptions level of service quality in Islamic and conventional banks in Malaysia by focusing on 20 Islamic banks and 25 conventional banks in Malaysia. These banks were selected to test the scale in situations that are quite different from those used in the original test.

The modified SERVQUAL model in this study consists of 7 dimensions; 5 of which are from the original SERVQUAL (reliability, empathy, responsiveness, assurance and tangibles), and two additional dimensions: 1 dimension is on ‘Islamic values’ and another 1 dimension is on ‘social responsibility’. Since some studies have clearly identified the influence of Islamic banking variables on the formation of a customer’s perception of service quality in Islamic banks (Metawa and Almosawi, 1998; Naser *et al.*, 1999; Othman and Owen, 2002; Jabnoun and Al-Tamimi, 2003; Othman and Owen, 2005; Al-Zaabi, 2006; Tahir and Bakar, 2007; Abdullrahim, 2010), it is considered that ‘Islamic values’ should be incorporated into the modified model.

To reiterate, it is essential to include the Islamic values dimension in this study since half of the target respondents are the customers of Islamic banks. It should be noted that, as discussed in Chapter 3, the variables included for the Islamic values in this study are adapted from the CARTER model (by Othman and Owen, 2002). The variables included are: ‘Providing banking services according to Islamic *Shari’ah*’, ‘Having well known and trustworthy *Shari’ah* Advisory Board’, ‘Neither paying nor taking interest on savings and loan accounts’, ‘Providing profit-sharing investment account’, ‘Products and services prices being competitive’, and ‘Employees having knowledge on Islamic banking products and services’.

As for social responsibility dimension, it was added due to the increasing concern about social responsibility of financial institutions in Malaysia. Thus, the information on banks’ social responsibility will contribute towards enriching the literature and enhance the empirical analysis on the banks’ service quality.

### **5.3 IDENTIFICATION OF MODEL, VARIABLES AND HYPOTHESES DEVELOPMENT**

This study attempts to investigate customers’ expectations and perceptions of the level of service quality of Islamic and conventional banks in Malaysia. Thus, a deliberate effort was made to include a total of 29 variables in the study in consistence with the SERVQUAL model presented in Chapter 2 and Chapter 3, which are considered essential to respond to the research question in an efficient manner. In other words, the subject consists of many potentially relevant variables to be assessed which enable us to understand these expectations and perceptions towards the service quality of banks in a comprehensive and integrated approach.

This study may also provide better insights into how customers expect and perceive service quality of Islamic and conventional banks, various dimensions of service quality, factors influencing patronage decisions, and other relevant issues related to service quality.

Furthermore, this research intends to measure not only the customers’ expectations and perceptions of the nature of service quality, but also to examine, to a certain extent, the basic knowledge of matters relating to *Shari’ah* concepts, which is vital and makes Islamic banking as unique and different from its conventional counterpart.

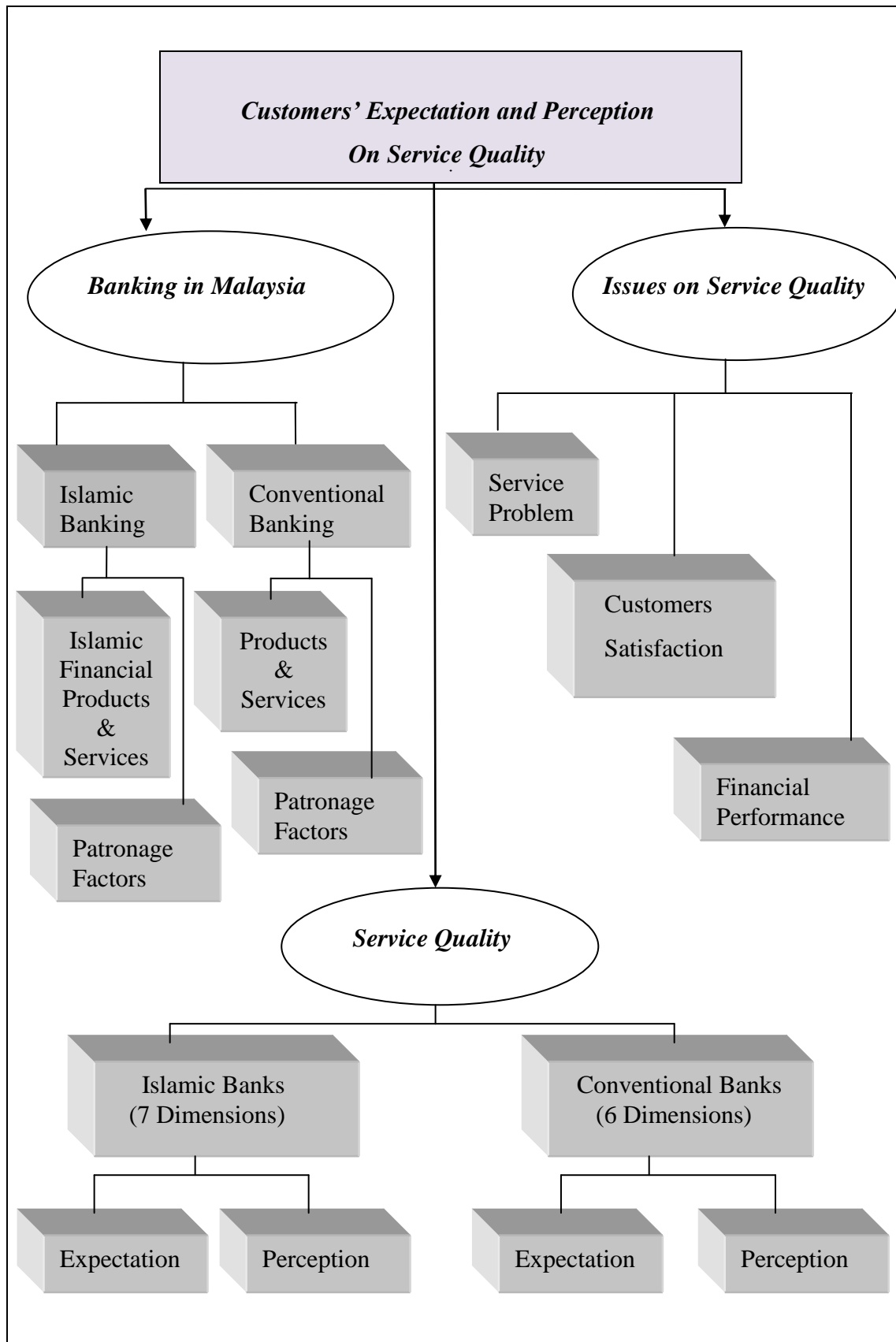
Figure 5.1 offers an overview of the main variables used in this study in selecting the research tools in order to achieve the research aims and objectives. These are developed from the concepts and models presented in Chapter 2 and Chapter 3.

Furthermore, it has been widely recognised that expectations and perceptions may affect the consequent behaviour of customers. Fundamentally, behaviour is concerned with what subjects have done, or are currently doing, or yet planning to do. The focus on behaviour therefore, entails a picture of what type of actions respondents may take to express their beliefs and attitudes towards some particular subjects. Hence, it is crucial to gauge the respondents' opinion through their expectations and perceptions of the service quality of banks based on the various dimensions of service quality.

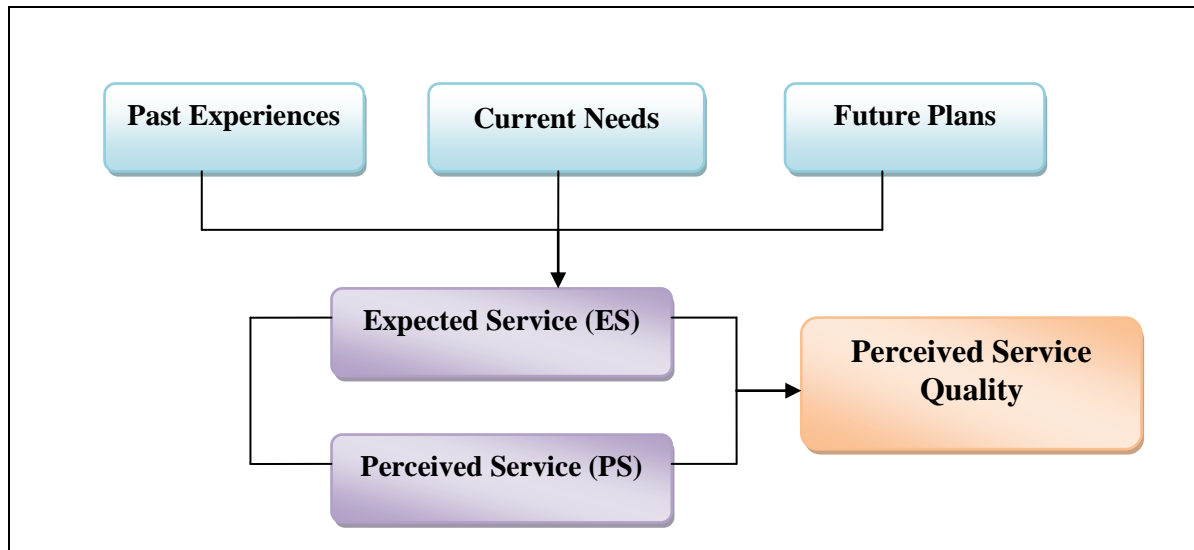
As specified earlier, Parasuraman *et al.* (1988:16) defined perceived service quality as “a global judgment, or attitude, relating to the superiority of the service”. They also noted that service quality, as perceived by customers, arise from a comparison of what they feel service firms should offer (their expectations), with their perceptions of the performance of firms providing the services. Furthermore, Parasuraman *et al.* (1988:168) relate the concept of perceived service quality to the concepts of perceptions and expectations as follows: “Perceived quality is viewed as the degree and direction of discrepancy between consumers' perception and expectation”.

In addition, when ‘Expected Service’ (ES) is higher than ‘Perceived Service’ (PS), the perceived service quality is less than satisfactory, which inclined to be unacceptable quality, with increased discrepancy between ES and PS. In the case when ES is equal with PS, the perceived service quality is satisfactory; and when ES is lower than PS, the perceived service quality is more than satisfactory and will lend towards ideal quality, with increased discrepancy between ES and PS (Parasuraman *et al.*, 1985).

**Figure 5.1: Major Variables Used in this Research**



**Figure 5.2: Perceived Service Quality**



In addition, since Malaysia practices a dual banking system, the Islamic banking is operating side by side with the conventional banking. Thus, two set of questionnaire were designed to address these type of banking. The first section of the questionnaire for Islamic banks' customers includes 20 different Islamic banking products and services in order to explore their knowledge and awareness as well as general understanding of Islamic banking. They are asked about their familiarity with each of the financial product listed.

In this study, 29 variables are chosen representing 7 dimensions of service quality incorporated in the questionnaire for Islamic banks' customers. The variables in these 7 dimensions were selected and adapted based on previous research on service quality in the literature (adapted from SERVQUAL and CARTER model), together with the newly created variables of service quality that are relevant to our present study on Islamic banking institutions in Malaysia. These dimensions are Islamic banking values, social responsibility, reliability, empathy, responsiveness, assurance and tangible.

On the other hand, 23 variables were included in the questionnaire for the conventional banks' customers representing 6 dimensions of SERVQUAL as proposed by Parasuraman *et al.* (1991). These dimensions are reliability, empathy, responsiveness, assurance, tangible and social responsibility.

The social responsibility dimension is the new dimension that has been added in this study. It is argued that social responsibility facilitates an organisation to take

precedence as a corporate citizen in promoting ethical behaviour in its business activity. The argument which deserves articulating here is that an organisation cannot consider solely the financial performance to persist in this ever-changing circumstances of global competition, but also has a duty to the society in which they exists. Although this attribute appears to be highly intangible, it does contribute to the formation of the quality perceptions by customers. For example, a financial institution that provides loans to poor people with fewer rigid loan requirements would certainly be respected and appreciated by the customers. Thus, social responsibility convey strong indications towards improving the organisation's image and goodwill and consequently influencing the customers' overall evaluation of service quality and their faithfulness to the organisation (Sureshchandar *et al.*, 2001:116).

Furthermore, the study also presumes that Islamic banks' customers may expect their banks to behave socially responsible more than their conventional counterparts. This is based on the rationale that Islamic banking has a socially responsible role to play. Islamic banks should emphasise to serve the interest of society, and social good to be the main goal in any decision making besides the profit. Therefore, there is much more to Islamic banking than exclusively concentrating on profit maximisation like other commercial financial institutions. Accordingly, the social responsibility dimension is added to the existing dimensions of service quality in this study.

Based on Figure 5.1, Figure 5.2 and complemented by the review of the literature, the following hypotheses were formulated:

**1. Research Question on: Familiarity with Products and Services Offered by Islamic and Conventional Banks in Malaysia**

***Hypothesis 1: The majority of Malaysian Islamic banks' customers have a fair level of familiarity with products and services of Islamic banks.***

*H1-1: There are no statistically significant differences between different gender groups in the level of familiarity with products and services of Islamic banks.*

*H1-2: There are no statistically significant differences across various age groups in the level of familiarity with products and services of Islamic banks.*



*H1-3: There are no statistically significant differences across various income level groups in the level of familiarity with products and services of Islamic banks.*

*H1-4: There are no statistically significant differences across various educational backgrounds and qualification profile groups in the level of familiarity with products and services of Islamic banks.*

*H1-5: There are no statistically significant differences between customers of stand-alone Islamic banks and Islamic subsidiaries in the level of familiarity with products and services of Islamic banks.*

*H1-6: There are no statistically significant differences between customers of locally-owned and foreign-owned Islamic banks in the level of familiarity with products and services Islamic banks.*

*H1-7: There are no statistically significant differences across various groups with different durations of banking relationships in the level of familiarity with products and services of Islamic banks.*

For customers of conventional bank, a second set of questionnaire is developed in order to explore their awareness and knowledge of banking products and services. A total of 22 products and services offered by conventional banks were incorporated in the questionnaire. Hence, the following hypotheses were proposed:

***Hypothesis 2: The majority of Malaysian conventional banks' customers have a fair level of familiarity of products and services offered by the banks.***

*H2-1: There are no statistically significant differences between different gender groups in the level of familiarity of products and services offered by the banks.*

*H2-2: There are no statistically significant differences across various age groups in the level of familiarity of products and services offered by the banks.*

*H2-3: There are no statistically significant differences across various income level groups in the level of familiarity of products and services offered by the banks.*

*H2-4: There are no statistically significant differences across various educational backgrounds and qualification profile groups in the level of familiarity of products and services offered by the banks.*

*H2-5: There are no statistically significant differences between customers of locally-owned and foreign-owned conventional banks in the level of familiarity of products and services offered by the banks.*

*H2-6: There are no statistically significant differences across various groups with different durations of banking relationships in the level of familiarity of products and services offered by the banks.*

## **2. Research Question on: Bank Selection Criteria for Islamic and Conventional Banks in Malaysia**

Factors influencing the patronage decisions were also incorporated in both set of questionnaires. This question is to elicit the opinion and attitudes of the respondents about factors influencing their judgment when opening an account. Hence, the following hypotheses were formulated:

***Hypothesis 3: Malaysian Islamic banks' customers apply higher importance to the religious obligation factor along with other banking selection criteria when deciding to open an account with Islamic banks.***

*H3-1: There are no statistically significant differences between different gender groups when considering the religious obligation factor as an important patronage criterion to open an Islamic banking account.*

*H3-2: There are no statistically significant differences across various age groups' preferences when considering the religious obligation factor as an important patronage criterion to open an Islamic banking account.*

*H3-3: There are no statistically significant differences across various income level groups when considering the religious obligation factor as an important patronage criterion to open an Islamic banking account.*

*H3-4: There are no statistically significant differences across various educational backgrounds groups when considering the religious obligation factor as an important patronage criterion to open an Islamic banking account.*

*H3-5: There are no statistically significant differences between customers of stand-alone Islamic banks and Islamic subsidiaries when considering the religious obligation factor as an important patronage criterion to open an Islamic banking account.*

*H3-6: There are no statistically significant differences between customers of locally-owned and foreign-owned Islamic banks when considering the religious obligation factor as an important patronage criterion to open an Islamic banking account.*

*H3-7: There are no statistically significant differences across various groups with different durations of banking relationships when considering the religious obligation factor as an important patronage criterion to open an Islamic banking account.*

***Hypothesis 4: Malaysian banks' customers apply equal importance to the customer service quality factor along with other banking selection criteria when deciding to open an account with conventional banks.***

*H4-1: There are no statistically significant differences between different gender groups when considering the customer service quality factor as an important patronage criterion for opening a bank account.*

*H4-2: There are no statistically significant differences across various age groups when considering the customer service quality factor as an important patronage criterion for opening a bank account.*

*H4-3: There are no statistically significant differences across various income level groups when considering the customer service quality factor as an important patronage criterion for opening a bank account.*

*H4-4: There are no statistically significant differences across various educational backgrounds groups when considering the customer service quality factor as an important patronage criterion for opening a bank account.*

*H4-5: There are no statistically significant differences between customers of locally-owned and foreign-owned conventional banks when considering the customer service quality factor as an important patronage criterion for opening a bank account.*

*H4-6: There are no statistically significant differences across various groups with different durations of banking relationships when considering the customer service quality factor as an important patronage criterion for opening a bank account.*

### **3. Research Question on: Expectations and Perceptions of Customers for Service Quality Provided by Islamic and Conventional Banks in Malaysia**

***Hypothesis 5: Malaysian banks' customers apply equal importance in terms of their opinion of the expectations and perceptions of service quality dimensions in Malaysian banking.***

*H5-1: There are no statistically significant differences between the customers' expectations and perceptions regarding the 'Islamic Values' dimension.*

*H5-2: There are no statistically significant differences between the customers' expectations and perceptions regarding the 'Assurance' dimension.*

*H5-3: There are no statistically significant differences between the customers' expectations and perceptions regarding the 'Responsiveness' dimension.*

*H5-4: There are no statistically significant differences between the customers' expectations and perceptions regarding the 'Tangible' dimension.*

*H5-5: There are no statistically significant differences between the customers' expectations and perceptions regarding the 'Empathy' dimension.*

*H5-6: There are no statistically significant differences between the customers' expectations and perceptions regarding the 'Reliability' dimension.*

*H5-7: There are no statistically significant differences between the customers' expectations and perceptions regarding the 'Social Responsibility' dimension.*

#### **4. Research Question on: The Relationship between Customer Satisfaction and Service Quality Dimensions in Islamic and Conventional Banks in Malaysia**

***Hypothesis 6: There is a significant relationship between customers' satisfaction and the service quality dimensions for expectation based service quality for the entire sample.***

*H6-1: There are no statistically significant relationships between the customers' satisfaction and the 'Islamic Values' dimension for expectation based service quality.*

*H6-2: There are no statistically significant relationships between the customers' satisfaction and the 'Assurance' dimension for expectation based service quality.*

*H6-3: There are no statistically significant relationships between the customers' satisfaction and the 'Responsiveness' dimension for expectation based service quality.*

*H6-4: There are no statistically significant relationships between the customers' satisfaction and the 'Tangible' dimension for expectation based service quality.*

*H6-5: There are no statistically significant relationships between the customers' satisfaction and the 'Empathy' dimension for expectation based service quality.*

*H6-6: There are no statistically significant relationships between the customers' satisfaction and the 'Reliability' dimension for expectation based service quality.*

*H6-7: There are no statistically significant relationships between the customers' satisfaction and the 'Social Responsibility' dimension for expectation based service quality.*

***Hypothesis 7: There is a significant relationship between customers' satisfaction and the service quality dimensions for perception based service quality for the entire sample.***

*H7-1: There are no statistically significant relationships between the customers' satisfaction and the 'Islamic Values' dimension for perception based service quality.*

*H7-2: There are no statistically significant relationships between the customers' satisfaction and the 'Assurance' dimension for perception based service quality.*

*H7-3: There are no statistically significant relationships between the customers' satisfaction and the 'Responsiveness' dimension for perception based service quality.*

*H7-4: There are no statistically significant relationships between the customers' satisfaction and the 'Tangible' dimension for perception based service quality.*

*H7-5: There are no statistically significant relationships between the customers' satisfaction and the 'Empathy' dimension for perception based service quality.*

*H7-6: There are no statistically significant relationships between the customers' satisfaction and the 'Reliability' dimension for perception based service quality.*

*H7-7: There are no statistically significant relationships between the customers' satisfaction and the 'Social Responsibility' dimension for perception based service quality.*

***Hypothesis 8: There is a significant relationship between customers' satisfaction and the service quality dimensions of Islamic banks.***

*H8-1: There are no statistically significant relationships between the customers' satisfaction and the service quality dimension of Islamic banks for expectation based service quality.*

*H8-2: There are no statistically significant relationships between the customers' satisfaction and the service quality dimension of Islamic banks for perception based service quality.*

***Hypothesis 9: There is a significant relationship between customers' satisfaction and the service quality dimensions of conventional banks.***

*H9-1: There are no statistically significant relationships between the customers' satisfaction and the service quality dimension of conventional banks for expectation based service quality.*

*H9-2: There are no statistically significant relationships between the customers' satisfaction and the service quality dimension of conventional banks for perception based service quality.*

**5. Research Question on: The Relationship between Financial Performance, Horizontal Diffusion and Service Quality Performance in Islamic and Conventional Banks in Malaysia**

***Hypothesis 10: There is no correlation between the service quality performance and the financial performance in the sampled banks.***

*H<sub>10-1</sub>: There is no correlation between the service quality performance and the financial performance in the sampled Islamic banks.*

*H<sub>10-2</sub>: There is no correlation between the service quality performance and the financial performance in the sampled conventional banks.*

***Hypothesis 11: There is no relationship between horizontal diffusion of the entire banks and their service quality performance.***

*H<sub>11-1</sub>: There is no relationship between horizontal diffusion of the Islamic banks and their service quality performance.*

*H<sub>11-2</sub>: There is no relationship between horizontal diffusion of the conventional banks and their service quality performance.*

After identifying the hypotheses which are to be tested with the primary data collected for this study, the following section presents the philosophical background

guiding the methodological framework of the study. The section also explains how the research constructs were operationalised and the measures used.

The following sections present the operational nature of the research in terms of its methodological approaches.

#### **5.4 RESEARCH METHODOLOGY AND STRATEGY**

Research methodology is defined as “the philosophy or general principle which guides the research” (Dawson, 2009:14). It is the complete approach to studying a topic and includes issues and procedures related to a research. There are two distinctive clusters of research strategy or general orientation to the conduct of research, namely quantitative and qualitative strategy.

According to Bryman (2008:22), quantitative research can be understood as “a research strategy that emphasises quantification in the collection and analysis of data”. It also entails a deductive approach to the relationship between theory and research, in which the emphasis is placed on the testing of theories. Furthermore, it embodies a view of social reality as an external objective reality. In contrast, qualitative research methodology refers to the research strategy that usually emphasises words rather than quantification in the collection and analysis of data. It also emphasises an inductive approach to the relationship between theory and research, in which the emphasis is placed on the generation of theories, whenever it is possible (Bryman, 2004).

Qualitative research, hence, focuses on the constructed reality of the research participants. It is employed to observe or investigate matters that relate and affect human behaviour (Kumar, 2008). It also embodies a view of social reality as a constantly shifting emergent property of individual creation (Bryman, 2004). Vanderstoep and Johnston (2009) argue that qualitative researchers capture or grasp the research participants’ thought more than anyone else; only the research participant can authentically express his/her understanding of his/her experience. Thus, the task of the researcher is simply to explain the research participants’ interpretations. Any analysis of the data is clearly recognised as the researcher’s interpretation, and has no less significant or greater weight than anyone else’s interpretation (Vanderstoep and Johnston, 2009:174).



As depicted in Table 5.1, qualitative research methodology differs from quantitative research methodology in its purpose, focus, methods, and criteria for truth. It discards many of the quantitative presumptions about research that are based on objective, positivist beliefs about the world, and instead perceives reality as constructed in the mind of the knower and positioned in cultural and historical contexts (Vanderstoep and Johnston, 2009:179).

**Table 5.1: The Differences between Qualitative and Quantitative Research**

Criteria	Qualitative	Quantitative
<b>Purpose</b>	Descriptive	Predictive
<b>Focus</b>	Voice of the marginalised	Typical, average or trend
<b>Methods</b>	Inductive	Deductive
<b>Criteria for Truth</b>	Phenomenological validity	Statistical proof

*Source:* Adapted from Vanderstoep and Johnston (2009: 167).

It is argued that the purpose of qualitative research is more descriptive than predictive. For this reason, the qualitative approach is normally less concerned with aggregate generalisations. Thus, much of qualitative research does not claim to be generalisable, rather, it claims only to represent the group studied (Vanderstoep and Johnston, 2009: 167). Furthermore, the focus of qualitative research is to give right to be heard to people at the margins of a culture. In other words, there is bigger chance to investigate into matters in more detail and discover things that may not have become apparent before (Denscombe, 2002:31). In contrast, the focus of quantitative research is to find the typical, the average, and the trend that can be generalised to large populations.

Nevertheless, the significant distinguishing characteristic between quantitative and qualitative methods is that the former methodology is deductive and the latter method is inductive. The deductive research approach is defined by Taylor *et al.* (2006) as “a reasoning process that begins with a self-evident and draws from it a conclusion relating to a particular case”. In other words, a deductive approach is a process of reasoning that flows from a theory/hypothesis to systematic empirical observation to conclusion. The researcher’s starting point is the theoretical knowledge acquired

from the literature or earlier empirical findings, and then hypotheses are formed and tested against empirical conditions (Flick, 1998:41).

On the other hand, induction is a reasoning process that begins with a specific case and draws from it a conclusion of wider and more general relevance (Taylor *et al.*, 2006:4). In other word, an inductive approach is a process of reasoning in which observation prevails over the theory, hypothesis, and interpretation. It is a research process starting with empirical data and proceeding to draw generally applicable conclusions from it (Taylor *et al.*, 2006:4). The process of the inductive approach starts with an idea or expectation, which may develops into a research hypothesis. This hypothesis or expectation then will be tested. The results of these observations are used to create a general preposition or a theory.

This study, therefore, adopts a qualitative research methodology as it aims at exploring the perceptions and opinions of customers of Islamic and conventional banks towards service quality of Malaysian banks. In other words, since its motivation is to explore people's opinion on specific situation, a qualitative methodology is the most suitable methodology for this study.

This research also emphasises an inductive approach strategy to the relationship between theory and research. This is because it is more appropriate for any research that deals with behavioural analysis, where the findings and conclusion of the research are formed through observations. For this research, an inductive approach is considered most appropriate, as it commences with the observation of the field in the form of primary data and tests the hypotheses developed with the primary data collected. The observational data will be used to develop conclusions concerning the behavioural aspects of the customers with regard to their perceived service quality of Malaysian banks.

## **5.5 RESEARCH DESIGN**

A research design is a useful tool in emergent research as it provides a framework for the collection and analysis of data. Nevertheless, before classifying the research design, researchers should identify the purpose of their research. Richey and Klein (2007: 43) state three purposes of research that can be associated with any specific research: 'exploratory', 'descriptive' and 'explanatory'.

‘Exploratory’ research is a type of research that collects data and facts in order to explain a situation or an event. It is usually conducted to investigate topics, which very little is known, and the research design is less structured than in the descriptive study (Richey and Klein, 2007:43). In other words, it is normally conducted when the researcher is looking for an answer to an unknown condition. The objective of exploratory research is primarily to describe how things are, rather than how they will be, or how they should be, or even why they are as they are (Denscombe, 2002:27). Meanwhile, ‘descriptive’ study is more of fact finding and focusing on relatively less dimensions of a well-defined entity (Richey and Klein, 2007:43). The objective of descriptive study is to “ascertain a profile or to describe relevant aspects of the phenomena of interest to the researcher from an individual, organisational, industry-oriented, or other perspective” (Sekaran, 2000: 125). Lastly, ‘explanatory’ studies are embarked on not only to describe phenomena, but also to test relationship between elements of the problem with the objective of ‘why things are as they are’ (Richey and Klein, 2007:43).

For this study, the main reason of conducting the investigation is to identify and explore people’s opinion in order to describe the customers’ expectations and perceptions of service quality management in the Malaysian banking system. Thus, this study is an exploratory in nature. As far as the researcher is aware, barely any research has been conducted to study the expectations and perceptions of Malaysian customers towards the service quality management of Islamic and conventional banks and its effect to the financial performance. Thus, the exploratory nature of the research helps to find answers for an unknown case.

This study also adopts descriptive research by using a cross-sectional study (sample survey). Bryman (2008) defines a cross-sectional research design as “the collection of data on more than one case and at a single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more variables, which are then examined to detect patterns of association”. Since primary data required for this research collected at one point in time from sampled people being the customers of the sampled banks, it is a cross-sectional study.

As for the descriptive research, this research considers descriptive research as useful, as the research questions of this study also aims to define the situation as it is

observed, such as the attitude of customers towards certain patronage factors, such as, the religiosity factors, customers' service quality, and social responsibility.

Furthermore, the research designs can also be classified into one-shot design, longitudinal design, cross-sectional design and repeated independent samples design (Vanderstoep and Johnston, 2009). The most common research design is the 'one-shot design', whereby one group of participants is studied only one time. This can be done with surveys, experiments, or field studies. It is characterised as a one-shot study because the researcher will collect data from one group of participants only one time. Meanwhile, a 'longitudinal design' studies the same respondents over multiple data-collection periods. In other words, the true effects of time or your intervention can be assessed through changes observed in the sample. A 'cross-sectional design' studies several different groups of people, for instance, of different ages to compare whether age differences exist in the behaviour or attitude being studied. Vanderstoep and Johnston (2009) describe it as "the most efficient way to identify the age at which certain social and psychological factors occur". Studies using a 'repeated independent samples design' investigate a different sample of people over repeated trials to track changes in behaviours or attitudes (Vanderstoep and Johnston, 2009).

This research should also be considered as a 'case study'. Saunders *et al.* (2009:145) define it as "a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence". A case study can also offers the opportunity to explain why certain outcomes might happen (Denscombe, 2002:31) as well as it has the ability to generate answers to the 'what?' and 'how?' questions (Saunders *et al.*, 2009:146).

In sum, in order to achieve the objectives of this research, as explained above, a mixture of design and strategies is considered to be the most suitable way to deal with the research questions. Survey techniques using a cross-sectional time horizon have been used, as well as case studies of the banking industry in Malaysia within the applied research framework.

Through a different dimension, Bryman (2008:31) states that research design should reflect the decisions about the priority being given to a range of research process. These include:

- (i) Expressing causal connections between variables;
- (ii) Generalizing to larger groups of individuals than those actually forming part of the investigation;
- (iii) Understanding behaviour and the meaning of that behaviour in its specific social context;
- (iv) Having a temporal (*i.e.* over time) appreciation of social phenomena and their interconnections.

Since the aim of this study is to analyse service quality management in Islamic and conventional banking in Malaysia through an expectation and perception analysis. In doing so, this research also endeavours to investigate the perceived nature of service quality in foreign banks operating in Malaysia. In addition, it aims to correlate the financial performance of these banks to service quality management to identify whether there is any causal relationship. Therefore, it constitutes the causal connection as identified by Bryman (2008) and suggests a generalisation about the customers' expectations and perceptions level towards the service quality of a bank, based on the results, fulfils Bryman's (2008) second dimension.

In addition, since the study is a case study, it aims to work with a special sample within a special social context. It attempts to understand the perception level and attitude of the customers towards service quality of a bank using a questionnaire survey. Therefore, it fulfils the third dimension that Bryman (2008) identifies as a function of research design. However, this study fails to fulfil the fourth dimension identified by Bryman (2008), as this study is constructed with cross-sectional analysis and therefore does not take into account the developments in a time horizon.

## **5.6 RESEARCH METHOD**

Research method is an essential part of the social sciences research. Dawson (2009:23) defines research methods as "the tool used to gather the data". In other words, it utilises various techniques in the data collection and analysing stage. The research method, hence, has two aspects: the first is data collection and the second is data analysis.

The data collection and analysing methods are classified as qualitative and quantitative methods. Examples of qualitative data collection methods includes

interview, focus groups and observations, while qualitative data analysis for these methods include thematic analysis, discourse analysis and content analysis. Meanwhile, quantitative data collection methods include questionnaire survey, as it involves creating measures of behaviours, thoughts or attitudes (Vanderstoep and Johnston, 2009:59). Nevertheless, issues of validity and reliability are very crucial in quantitative methods, meaning that the measures must be truthful and consistent (Dawson, 2009:114; Vanderstoep and Johnston, 2009:59).

It is sometimes necessary to use more than one research method in order to optimise the result of a study due to the complexity of a social phenomenon. Therefore, triangulation, which is defined as the combination of two or more methods, may be necessary, which has become increasingly accepted in the area of social research. It helps to obtain a variety of information on the same issue and to use the strengths of each method to overcome the deficiencies of the other. For that reason, to achieve the main objectives of this research, this study employs both quantitative methods in the form of questionnaire survey and qualitative methods in the form of textual analysis in the literature chapters. In addition, the secondary data in the form of qualitative and quantitative data are used for the descriptive analysis. Since this research attempts also to add further meaning to the results and findings beyond quantitative findings, triangulation is chosen as the main method for this study, which includes quantitative data collection method in the form of questionnaire, descriptive data collection in the form of statistical data, and quantitative data analysis in the form of statistical techniques and qualitative data analysis in the form of interpretative method,

### **5.6.1 Data Collection**

Researchers use a wide range of methods to collect their data such as observational, interview or questionnaire. Nevertheless, the aim of the research will provide an indicator to the most suitable methods (Dawson, 2009:38). There are mainly two categories of data utilised in any research project, namely primary and secondary data. Examples of secondary data include annual financial report, government statistical reports, companies' shares prices, and other similar information, which is available from reliable sources.

In this study, both primary and secondary data are collected. As for the empirical part, the researcher used primary data assembled through questionnaire mainly to suit the nature and purpose of this research which were to elicit respondents' opinions and attitudes towards service quality of Islamic and conventional banks in Malaysia. The secondary data are used to acquire other pertinent information about the Islamic banking systems, which were obtained from the annual reports of the banks under study. In order to define the service quality dimensions for Islamic banks and to develop the research framework and hypotheses, other secondary data from academic journals, books, magazines, online articles and web-pages, professional and academic conferences and working papers in both service quality areas and Islamic banking fields were also used. Furthermore, these resources provided the most up-to date information about the development of service quality management and the Islamic banking industry.

Since this study aims at exploring the perceptions of the customers, the questionnaire survey as a quantitative research method was used. Denscombe (2002:6) defines the word 'survey' as "to view comprehensively and in detail". Survey usually connects to the present situation and entails an effort to present a picture of how things are at the certain time at which the data are gathered (Denscombe, 2002:6). The questionnaire survey is considered to be the most suitable technique in collecting the primary data, as this study aims to explore the perceptions and expectations of a large number of people to make generalisation. It also allows a quantitative analysis to be conducted in testing inferences and also its potential to generalise the findings.

There are wide range of techniques in collecting primary data and administering the questionnaire such as face-to-face interviews, telephone interviews, self-administered questionnaires, and more currently, via e-mail and World Wide Web.

Questionnaire is defined by Wilson and Sapsford (2006: 93) as "structured set of questions, containing all necessary instructions, for respondents to fill in by themselves". Respondents are requested to read the questions and to answer either by ringing or ticking one of the 'answer boxes' provided; or, less likely to write in their personal 'free answer' to a question (Wilson and Sapsford, 2006: 93). Furthermore, the questions need to be unambiguous and easy to read, in order for the respondents to have clear information.

Although interviewer-administered schedule and self-administered questionnaires have many points in common, the former allows for more control over the interview than does the self-administered questionnaire (Sapsford and Jupp, 2006:99). Furthermore, questionnaires are just as much highly structured methods of data collection as are interview schedules. Their most important benefit over interviewer-led methods is that they are economical, particularly if they can be group-administered (Sapsford and Jupp, 2006:102). In the self-administered survey, there are two methods that can be carried out: postal survey and drop-off survey.

After weighing the advantages and disadvantages of several techniques, this study adopted the self-administered questionnaire approach which includes mainly close-ended type of questions and few optional open-ended questions using both mail survey and drop-off survey methodology for two reasons: First, it has been employed in many similar studies on customer perceptions of service quality (see for example Parasuraman *et al.*, 1991; Othman and Owen, 2002; Al-Zaabi, 2006). Secondly, it is appropriate for collecting data about attitudes and opinions. Secondly, the self-administered approach is suitable to deal with a large number of respondents at a diverse geographical location as proposed in this study.

#### **5.6.1.1. Sampling for Questionnaire**

Sekaran (2003:264) defines sampling as “the process of selecting the right individuals, objects or events for study”. There are many ways to choose a sample, and the method used will depend upon the area of research, the methodology and preference of the researcher. According to Vanderstoep and Johnston (2009:26), researchers make the differentiation between a population, which is the universe of people to which the study could be generalised, and a sample, which is the subset of people from the population who will participate in the current study. The sampling frame commonly refers to the eligible members of the population (Vanderstoep and Johnston, 2009:26). Due to some reasons, not everyone will choose to participate or will be available when the researchers attempt to recruit them, thus, the sampling frame must be bigger than the sample.

The key idea of sampling is to that by selecting some of the factors in a population, a conclusion may be drawn about the whole population (Cooper and Schindler, 2001: 163). Sampling is important because in almost all cases it is not practical to study all



the members of a population. Basically, there are two main types of samples: random sampling and non-random sampling.

#### **5.6.1.1.1. Random Sampling**

In random sampling, each member of the sampling frame has an equal chance of being chosen to participate in the study. Examples of random sampling are simple random sampling, systematic sampling, stratified sampling and cluster sampling. Simple random sampling involves selecting a certain number of participants out of the total number of possible participants in the sampling population (Vanderstoep and Johnston, 2009: 29). However, Cooper and Schindler (2001: 183) argue that this type of sampling is often impractical because it requires a population list that is often not available and it may be expensive to implement in both time and money. The advantage of simple random sampling is that the larger the sample, the more closely it will mirror the percentages in the overall population (Vanderstoep and Johnston, 2009; 29).

In systematic sampling, a researcher moves through the sampling frame list and selects one out of every fixed number of entries but because the selection is based on where one is on the list, not everyone has an equal chance of inclusion (Vanderstoep and Johnston, 2009:32). The major advantage of this type of sampling is its simplicity and flexibility. However, the disadvantage of this method is that periodicity within the population may skew the sample and results (Cooper and Schindler, 2001:190).

The research population can be segregated into several mutually exclusive subpopulations. Unlike simple random sampling, stratified random sampling involves selecting research respondents based on their membership in a stratum. In other words, dividing the sampling population into strata allows the researcher to sample people proportionately based on the size of each stratum (Vanderstoep and Johnston, 2009:32). The advantage of this type of sampling is that it improves the efficiency of the sample and enables the use of different methods in strata (Cooper and Schindler, 2001: 190).

While for cluster sampling, it involves randomly selecting or assigning groups of people, rather than individuals, based on membership in a group, geography, or some

other variables. The advantage of this type of sampling is that it provides an unbiased estimate of population and economically more efficient (Cooper and Schindler, 2001: 190). On the other hand, the disadvantage of this method is that it often lowers statistical efficiency due to subgroups being homogeneous rather than heterogeneous.

#### **5.6.1.1.2. Non-Random Sampling**

A non-random sampling is a sample in which each member of the population does not have an equal chance of being selected as a participant in the study. In non-random sampling, participants are selected because they satisfactorily meet the sampling objectives. Examples of non-random sampling are convenience sampling, snowball sampling and purposive sampling. Convenience sampling involves selecting readily available subject for study. It also frequently includes respondent whom the researcher knows or those who live close to the research location (Vanderstoep and Johnston, 2009:27). The advantage of this method is the ease with which the respondent can be recruited and normally the cheapest to conduct (Cooper and Schindler, 2001: 192; Vanderstoep and Johnston, 2009:27). Examples include informal pools of friends, family, employees or students. However, Cooper and Schindler (2001:192) argue that this method of sampling is the least reliable design. Another disadvantage, as with all non-random sampling techniques, is the lack of representativeness of the general population (Vanderstoep and Johnston, 2009:27).

As for snowball sampling, Cooper and Schindler (2001:194) argue that this type of sampling has found a niche in recent years in applications where respondents are hard to identify and are best to be found through referral networks. In snowball sampling, individuals are selected then used to locate others who may be eligible to participate. This second generation of participants is then contacted and who, in turn, identify other participants (Cooper and Schindler, 2001:194). The sample, like a rolling snowball, begins to build on itself and multiply in size. One advantage is the ability to grow a network of participants by taking advantage of the researcher's relationship with the current participants. Another related advantage is that snowball sampling allows the researcher to focus on respondent who has specific characteristics of interest to the research (Vanderstoep and Johnston, 2009: 27). The apparent disadvantage of snowball sampling is similar to convenience sampling: the sample will probably not be representative.

On the other hand, the purposive sampling is used if description rather than generalisation is the goal. Purposive sampling is a non-probability sample that conforms to certain criteria (Cooper and Schindler, 2001: 192). In this type of sample, it is not possible to specify the possibilities of one person being included in the sample (Dawson, 2009). There are two major types of purposive sampling: judgment sampling and quota sampling. The judgment sampling occur when a researcher selects sample members to conform to some criterion, while quota sampling is used to improve representativeness and the subject was chosen based on certain relevant characteristics describing the dimensions of the population (Cooper and Schindler, 2001:192).

#### **5.6.1.1.3 Sampling in this Research**

As regards to this research, this study could not employ random sampling because the researcher has limited knowledge of the number of banks customers in Malaysia as the banks keep their customers' detail confidential. Hence, non-random sampling was the method resorted to by the researcher in this study, the population size are unknown and is deemed impossible to identify. This study, therefore, employed the non-random purposive and snowballing sampling. The sampling strategy was purposive, because the researcher purposely chose a group of people that have experience in dealing with conventional or Islamic banks to gauge their perceptions of the service quality of these banks. Subsequently, snowball sampling method was applied in selecting the respondents in order to increase the number of respondents that would be part of the sample.

Having determined the technique used for data collection, which is self-administered questionnaire, the next step is to define the population from which the sample is to be drawn. A population is the entire group of individuals or items from which a sample may be selected that one wishes to describe or study for statistical measurement. In this study, the researcher has identified customers of Islamic and conventional banks in Malaysia as the target respondent groups. Hence, the target population comprised of customers who have had a banking relationship with these banks in using consumer financing products such as house financing, personal financing, motor vehicle financing, and education financing. The target respondents were also inclusive of those who have had accounts with any of these banks under study.

Due to cost and time constraints, the researcher could not cover a nationwide sampling process. Therefore, the researcher purposively divided the samples into four zones: Central, South, North and East. The samples were collected in selected states within each zone. The population of each zone is formed from various socioeconomic and religious backgrounds, which are representative of the population of Malaysia.

#### **5.6.1.2. Research Instrument**

##### **5.6.1.2.1. Instrument Development**

Questionnaire construction is one crucial step in a research survey. The type of questions used and the design of a questionnaire vary according to the type of information required. The questionnaire needs not only to elicit useful answers to the questions, but also elicit comments which may provide valuable insights to the situation. Hence, the questions must be carefully phrased in order to secure the desired info. Many steps are involved in the construction of a questionnaire. In this study, the researcher begins with the research objectives and research questions, and then goes through the process of preparing the questions.

The main objectives of this study are threefold. Firstly, the study intends to discuss the service quality models and justify theoretically how service quality is pertinent to the banking sector in Malaysia. Secondly, the study aims to identify the customers' expectations and perceptions of Islamic and conventional banks in Malaysia regarding service quality. In particular, the SERVQUAL model will be applied with some modifications in the original model. Thirdly, the financial performance of the Islamic banks will be measured and correlated with the perceived service quality.

The questionnaire was designed with two goals in mind: relevance and accuracy. It is relevant if no unnecessary information is collected. Accuracy means that the information is reliable and valid. Thus, the sequence and wordings of the questions were designed in such a way to elicit accuracy and informative answers from the respondents. The reliability and validity issues are discussed in the subsequent sections of this chapter. In addition, the researcher went through several processes to develop the questionnaire. The development of questionnaire was carried out after reviewing most of the relevant literature which included, among others, research

methodology books, journal articles, PhD theses, internet materials and discussing with experienced Malaysian researchers.

#### **5.6.1.2.2. Questionnaire Contents and Design**

Two set of questionnaires were used in this study. The first is for the customers of Islamic banks, and the other for the conventional banks. Both set of the questionnaire consisted of eight pages, including a covering letter that briefly stated the objectives and also assured the respondents that all the information they provided would be treated with strict confidentiality. A sample for each of the questionnaire can be found in the Appendix section.

The questionnaire for the Islamic banks' customers was divided into three parts. The first part included questions related to respondent's knowledge of the products and services of Islamic banking, and factors influencing their judgment to patronise an Islamic bank. There are 20 variables for the awareness and knowledge of Islamic banking products and services. Each variable uses a dichotomous scale; 'yes' if the respondents are aware and 'no' if they are not aware with the Islamic banking products and services. This question is adopted to know the level of awareness and knowledge of the Islamic banks' customers. As for the patronise question, there are 11 variables included. The responses to each of the variable were designed on a 5 Likert scale where 1=Not important at all, 2=Not important, 3=Neutral, 4=Important, 5=Very important.

Part two was designed to identify the expectations and perceptions of these customers towards the level of service quality provided by the bank. There are 29 variables for the expectations part and another 29 variables for perceptions part. The variables were adopted from the original SERVQUAL (Parasuraman *et al.* 1988) and CARTER model (Othman and Owen, 2002). The responses to each of the variable were designed on a 5 Likert scale where 1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5= Strongly agree.

General information and the respondent's personal details were requested in part three. The variables in this part are considered as independent variables that are used in the regression model to explore the relationship between these and the dependent variables.

The second set of questionnaire was designed for customers of conventional banks. It was also divided into three parts. The first part dealt with the customer's familiarity with the products and services offered by a conventional bank. This question tests the knowledge and awareness of the respondents towards the banking products and services offered by conventional banks. There are 22 variables for this question. Each variable utilises a dichotomous scale; 'yes' if the respondents are aware and 'no' if they are not aware with the banking products and services.

Factors influencing their judgment to open an account with the bank were also asked. As for the patronise question, there are 10 variables included. The responses to each of the variable were designed on a 5 Likert scale where 1= Not important at all, 2= Not important, 3=Neutral, 4=Important, 5= Very important.

The second part focused on the customers' expectations and perceptions of the conventional banks' service quality. All the dimensions of service quality used to provide a comprehensive and perceptive view of the level of service quality of the bank. There are 23 variables for the expectations part and another 23 variables for perceptions part. The variables were adopted from the original SERVQUAL (Parasuraman *et al.* 1988) and social responsibility dimension was added in this research. The responses to each of the variable were designed on a 5 Likert scale where 1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5= Strongly agree.

The third part dealt with the respondent's demographic information. This section consists of twelve (12) questions which are intended to obtain personal information from the respondents. It is used as a control variable for the research.

Another critical section in the questionnaire is the measurement of service quality gap which is defined, as explained previously, perception-minus-expectation. According to Parasuraman *et al.* (1991), the two parts of SERVQUAL may seem repetitive to some respondents, and do increase the questionnaire's length, however, they have not encountered problems with respondents' not understanding the distinction between these part. However, the contribution of such an exercise cannot be denied in terms providing valuable information on the demand and supply conditions.

The ordering of questions in this study followed the suggestion of Wilson and Sapsford (2006), who argue that it is generally a better format to put demographic

questions (*e.g.* age, marital status, occupation,) towards the end, if feasible. The reason is partly because they are uninteresting questions to the respondent and ones wishes to engage his or her interest with the questionnaire as soon as possible, and partly because, being sensitive, they may be resented. In addition, other topics which may be regarded as sensitive include sexual orientation, health status, income, professional and educational qualification; and such questions should not come near the beginning of a questionnaire (Wilson and Sapsford, 2006:105). Hence, in order to achieve efficiency, these advices have been taken into account.

#### **5.6.1.2.3. Pilot testing**

Before the questionnaires were distributed to potential respondents, a pilot test was conducted to determine the appropriateness and relevance of the questions. A pilot investigation is defined as “a small-scale trial before the main investigation, intended to assess the adequacy of the research design and of the instruments to be used for data collection” (Wilson and Sapsford, 2006:103).

The objective of pilot testing is mainly to refine the wording, filter the questions, check on the uniformity, consistency and validity of variables used in the instruments, test the language used, the time taken to answer the questionnaire, and test the research design. This step is necessary to minimise the problems that may arise when administering the final version. In addition, the pilot study is essential in ensuring that the translation of the questionnaire would not lead to any misunderstandings. Thus, once the first draft of the questionnaire was designed, each question was tested and assessed through the pilot testing.

Wilson and Sapsford (2006:103) also argue that pilot investigations do not attempt to represent, in the statistical sense, the correct proportions of different types of individuals in the population because the purpose is not to estimate the true proportion of such types, but to cover the entire range of replies, which may be given to any of the possible questions in the first draft of a questionnaire. By covering the full range of replies, the researcher is then in position to work out a set of code or response categories, which embraces the entire range of responses which may be given. This is a counsel of perfections and no matter how good the pilot responses may turn up in the main study which has not been anticipated in the pilot results.

Therefore, sometime the response category of ‘Other (please specify)...’ is often incorporated in the codes for closed questions as a means of preventing a complete foreclosure of the researcher’s alternatives when unexpected and difficult-to-code responses are attained.

The pilot test for this study was conducted from March to April 2010 in the United Kingdom and Malaysia through a convenience sampling procedure: 40 respondents participated in this pilot test. After discussion with the research supervisor, the corrected initial draft of the questionnaire was piloted to lecturers from the International Islamic University Malaysia, University of Malaya, National University of Malaysia, experienced researchers on Islamic banking studies, and government officers. Their answers and opinions provided valuable feedback, especially with regard to the translation from English to Malay language and the suitability of some of the questions. Their comments also provided a better structure to the final questionnaire.

#### **5.6.1.2.4. Questionnaire Administration**

The actual data collection processes took place from April to June 2010. As mentioned before, geographically it was conducted in four zones in Malaysia: Central, East, North and South. The data collection was done in selected states within each zone: for the Central, the state of Selangor and Kuala Lumpur were selected; for the East, the state of Pahang is selected, while for the North, the state of Perak is selected; and as for the South, Negeri Sembilan and Malacca were chosen.

The questionnaires were circulated among government offices, private sector companies, financial institutions, the unemployed people and students in different universities; all within the selected states in each zone. The respondents are customers of Islamic or conventional banks in Malaysia. In addition, the official statistics obtained from the department of Statistics Malaysia was consulted to determine the strategy used in this study. Although the modes of collection were a drop-off survey and mail survey, the researcher was present all the time when the respondents were approached. However, there were slight differences in the process of data collection; these will be explained later in this section.



In drop-off survey mode, the respondents were approached in a friendly manner by the researcher and were asked about their willingness to participate in the survey. Once the agreement was received from the respondent, the researcher introduced the general purpose of the survey and asked whether they were one of the customers of Islamic or conventional bank. If the approached respondents are the customers of Islamic bank, a copy of questionnaire 'Set 1' (for Islamic banks' customers) was given to them; otherwise, if the respondents are the customers of conventional bank, a copy of questionnaire 'Set 2' (for conventional banks' customers) was given to them, either in English or Malay language based on their language preference. If the customers dealt with both Islamic and conventional banks, the customers are given the choice either to response to questionnaire 'Set 1' or 'Set 2' according to their preferences. The respondents were also assured that none of their personal details would be taken, and that all responses would be regarded as highly confidential. The respondents were given some time to complete the survey while the researcher waited for them to complete it. The completed survey forms were returned to the researcher. Next, the researcher also asked the respondents to connect her to other potential individual respondents they may know as being eligible to participate. This second layers of participants is then contacted and who, in turn, identified other participants for this survey; and hence snowballing and purposive sampling strategy was efficiently conducted.

It should also be noted that in order to increase the return, mail survey was used as well. In the mail survey, the researcher approached the potential respondents and asked nicely if they could participate in a survey. The objectives of the survey were explained to the prospective respondent and a brief explanation was also given to them. Accordingly, the potential respondents were given a survey questionnaire to answer at their own pace and return to the researcher by mail when completed. The respondents were given one week to complete the questionnaire. Sufficient time was given to the respondent to allow them to respond to the survey conveniently in their own time. In each institution, a representative was selected to help in collecting the completed questionnaire, and subsequently, the representative mailed the completed questionnaire to the researcher. The researcher adopted the drop-off survey mode and also mail survey since it was the most appropriate, feasible, and cost-effective mode. In addition, this study utilised closed-ended type of questions, which give the

researcher the advantage of getting a high response rate due to the fact that it easier to complete.

### 5.6.1.3. Return Rate of the Questionnaire

It should be noted that in the administration of the questionnaire there was an initial worry whether the return rate would be high enough to produce efficient findings, as the questionnaire schedule was rather long due to having expectations and perceptions related questions. In addition, most of the questions repeated for gauging both the expectations and perceptions. Despite such a background, it should be stated that the overall response rate was considered as very successful.

The researcher has decided to target a minimum of 400 completed questionnaires for each type of banks (Islamic and conventional banks). In order to achieve the defined target, the researcher divided the samples into 4 zones (Central, East, North and South). For each zone, 300 questionnaires were distributed (150 questionnaires for Islamic banks' customers and 150 questionnaires for conventional banks' customers) as depicted in Table 5.2, which shows the actual number of questionnaire distributed and received.

A total of 1,200 questionnaires were distributed to the Islamic and conventional banks' customers in Malaysia: 982 people responded, which implied about 82% return rate. The classifications of the respondents were as follows: 487 respondents were customers from Islamic banks, 454 were from conventional banks, and 41 questionnaires were non-usable.

**Table 5.2: Sample Size According to Zones in Malaysia**

Category	Zone	Questionnaire Distributed	Questionnaire Received	Usable Questionnaire
Islamic Banks	Central	150	137	132
	East	150	128	124
	North	150	119	115
	South	150	118	116
Conventional Banks	Central	150	132	125
	East	150	122	110

	North	150	110	105
	South	150	116	114
<b>Total</b>		1,200	982	941

Table 5.2 shows that from the Central zone, 132 usable questionnaires were from Islamic banks' customers, and 125 questionnaires were from conventional banks' customers. As for the East zone, the total numbers of usable questionnaires from Islamic and conventional banks' customers were 124 and 110 respectively. The total numbers of usable questionnaires for North zone were 115 for Islamic banks' customers and 105 for conventional banks' customers. While for the South zone, 116 and 114 were the numbers of usable questionnaires for Islamic banks' customers and conventional banks' customers correspondingly.

The adopted survey technique for this research was also motivated by great response rate from the earlier research that associated to banking customer behaviour, which were also using the same method. For instance, Mohd-Karim (2010) yielded 84%, Dusuki (2005) yielded 84%, and lastly, Metawa and Al-Mossawi (1998) yielded 75% response rate. Thus, the response rate result from this research further reinforce the facts that survey technique using closed-ended self administered questionnaires is appropriate for research into this kind of customer behaviour.

### **5.6.2. Bank Sampling**

For the purpose of this research, the researcher has identified Islamic and conventional customers as the research population. The perfect target population for this study is the whole customers of the Islamic and conventional banking in Malaysia. The list of the banks involved is as follows:

**Table 5.3: List of Conventional Banks in Malaysia**

No.	Local Banks	No.	Foreign Banks
1.	Affin Bank Berhad	1.	Bangkok Bank Berhad
2.	Alliance Bank	2.	Bank of America
3.	Ambank Berhad	3.	Bank of China (M)
4.	CIMB Bank	4.	Bank of Tokyo-Mitsubishi
5.	Hong Leong Bank	5.	BNP Paribas Malaysia Berhad
6.	Maybank Berhad	6.	Citibank
7.	Public Bank Berhad	7.	Deutsche Bank (M)
8.	RHB Bank Berhad	8.	HSBC Bank
		9.	Industrial and Commercial Bank of China
		10.	J.P. Morgan Chase Bank
		11.	Mizuho Corporate bank
		12.	OCBC Bank
		13.	Standard Chartered Bank
		14.	Sumitomo Mitsui Bank
		15.	The Bank of Nova Scotia
		16.	The Royal Bank of Scotland
		17.	United Overseas Bank

Source: Bank Negara Malaysia 2012.

**Table 5.4: List of Islamic Banks in Malaysia**

No.	Local Banks	No.	Foreign Banks
1.	Affin Islamic Bank	1.	Al-Rajhi Banking & Investment Corporataion (M) Berhad
2.	Alliance Islamic Bank	2.	Asian Finance Bank
3.	Am Islamic Bank	3.	HSBC Amanah (M) Berhad
4.	Bank Islam (M) Berhad	4.	Kuwait Finance House
5.	Bank Muamalat M.B.	5.	OCBC Al-Amin
6.	CIMB Islamic	6.	Standard Chartered Saadiq
7.	Hong Leong Islamic	7.	Al-Rajhi Banking & Investment Corporation
8.	Maybank Islamic	8.	Al-Khair International Islamic Bank
9.	Public Islamic	9.	Deutsche Bank Aktiengesellschaft
10.	RHB Islamic Bank	10.	Bank SyariahMuamalat Indonesia

Source: Bank Negara Malaysia 2012.

In an ideal circumstance, all aspects of the population are known; hence, the selection of the sampling frame would be carried out correctly. Nevertheless, in reality, it is

difficult to get an absolute list of the population particularly in populations of unknown size and in situations where there are legal limitations that make the total list of population unavailable (Mohd-Karim, 2010: 151). As depicted in Table 5.3 and Table 5.4, there are 25 conventional banks and 20 Islamic banks operating in Malaysia including the foreign banks. Thus, it is impossible for the researcher to get access to the whole list of Islamic and conventional banks' customers in Malaysia.

Although there is a limitation, the researcher has managed to select the most suitable sampling frame, which is believed to be the best alternative that is available at the time of the fieldwork. The sampling frame for this research is Islamic and conventional banks' customers throughout Malaysia, based on geographical location. As mention earlier, the researcher has divided the location into four zones (Central, East, North and South).

### **5.6.3. Data Validity and Reliability**

It is greatly suggested that prior to the actual data collection process, researcher ensure that the content and measurement of the variables in the questionnaires are valid and reliable. Data validity and reliability for any specific research are essential to prevent mistakes, which could point to a misrepresentation of the data.

#### **5.6.3.1. Data Validity**

It is crucial in any research to have a valid data. Validity refers to "the degree to which the question measures what it is supposed to be measuring" (Proctor, 2005: 208). In a functional manner, Field (2009:11) defines validity as "whether the instrument measures what it was designed to measures". In other words, the measurement used in the questionnaire must be suitable and match to the concept that the research aims to measure. Ryan *et al.* (2002: 123) argue that by building in adequate controls to the research design, the likelihood of obtaining valid conclusions from the study is improved. In quantitative data collection, especially in a questionnaire, the validity depends on the accuracy, honesty, and correct response from the respondents (Cohen *et al.*, 2007).

Cohen *et al.* (2007) admitted that it is unachievable for research to be 100% valid. Therefore, they recommended that to improve the validity of the data, thorough

sampling design, suitable instrument and appropriate statistical analysis of data must be taken into consideration. Hence, to make sure its validity before distributing it, abovementioned procedures were taken and the questions were assessed to make sure that the wording was sufficiently clear to the respondents. Meanwhile, to encourage sincerity from the respondents, anonymity was assured in the cover letter.

In addition, Vaus (2002) stated that there are three basic methods in which to access validity, namely content validity, construct validity, and lastly, criterion validity. Content validity depends on how well the researchers created measurement items to cover the content domain of the variable being measured (Badri *et al.* 1995:40). Indeed, the present study's selection of measurement items was based on an extensive review of the literature. By using rigorous statistical tests, the content validity in this research can be recognised as more objective.

Meanwhile, the term construct is related to a property that is offered to explain some aspect of human behaviour, thus, construct validity is the degree to which the test measures the construct it was designed to measure (Key, 1997). Vanderstoep and Johnston (2009:60) defines construct validity as "the extent to which the measure is on target to measure the construct being studied". This research had identified a significant construct related to service quality which is customers' satisfaction. The data gathered were compared with data from other studies that using the same test (see for example Al-Adwani: 2010, Othman and Owen: 2001). Hence, the construct validity for this research is achieved.

Ryan *et al.* (2002:123) define criterion validity as "the extent to which the result of the study may be generalised to other setting and samples". In other words, criterion validity, sometimes called predictive validity or external validity, is concerned with the extent to which a measuring instrument is related to an independent measure of the relevant criterion. This study adopted analysis from previously established empirical research, which was considered valid. Therefore, the use of measurement or test in past empirical research that is published in internationally peer-reviewed journals can be used as measurement validation.

### 5.6.3.2. Data Reliability

Proctor (2005: 208) defines reliability as “the consistency in reaching the same results when the measurement is made over and over again”. In other words, reliability refers to whether an instrument can be interpreted consistently across different situations (Field, 2009: 11). This means that if research is carried out on a similar group of respondents in a similar context, similar results will be found. There is a range of techniques for checking reliability and one of the ways that was used to ensure the reliability of the questionnaires was by pilot-testing all the questions beforehand.

According to Sekaran (2003: 307), Cronbach’s Alpha is an adequate test of internal consistency reliability. Therefore, the variables that were used in this questionnaire were also tested by using Cronbach’s Alphas statistical test in the SPSS programme to find the reliability of the responses. The value of Cronbach’s Alpha ranges from 0 to 1, where the higher values of Cronbach’s Alpha indicate higher reliability. The Cronbach’s Alpha for this study was computed and the results indicate that the measurement scales in this study was found higher than 0.9 as depicted in Table 5.4. Thus, according to Cronbach’s Alpha scale, this coefficient of reliability means that the collected responses through questionnaire have a good reliability and level consistency.

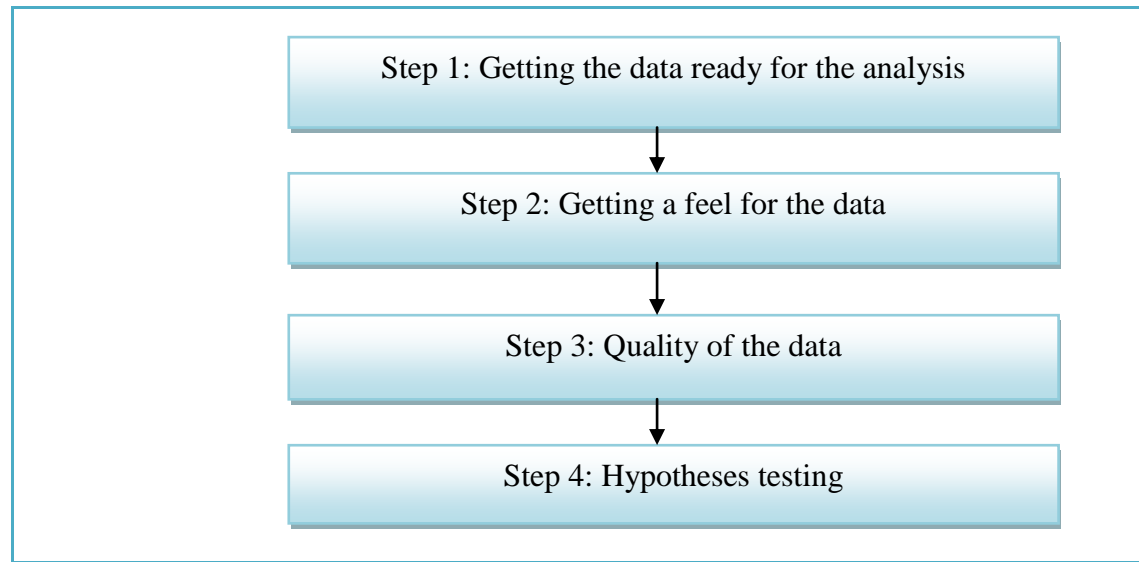
**Table 5.5: Reliability Statistics (Cronbach’s Alpha Coefficient)**

Questionnaire Respondents	Cronbach’s Alpha	N.of Items
Islamic Banks Customers	0.974	58
Conventional Banks Customers	0.958	46

### 5.6.4 Data Analysis Method

After identifying the research process, this section focuses on the data analysis methods. As mentioned previously, as part of triangulation, quantitative methods mainly used supported by interpretative oriented qualitative method of data analysis. To provide a structured understanding, the discussion of data analysis will be based on the steps suggested by Sekaran (2000: 302), as depicted in Figure 5.3.

**Figure 5.3: Steps for Data Analysis**



*Source: Sekaran (2000:302).*

For Step 1 (getting the data ready for the analysis), the researcher used SPSS statistical software to code and key-in the data, followed by editing the collected raw data to detect errors that would compromise quality standards. Then, in step 2 (getting a feel for the data), which is the basic step for data analysis, the dispersions and central tendency in the data set are checked to obtain a preliminary idea of the survey outcome in the form of descriptive statistical analysis. Next, in step 3 (quality of the data), Cronbach's Alpha reliability model is used to ensure the reliability and validity of the data. Subsequently, in step 4 (hypotheses testing), suitable statistical tests were identified to tests the hypothesis. In testing the hypotheses of this research, non-parametric tests were utilised to analyse the data as part of the quantitative methods.

Because research is not done on populations (entire groups of people), but rather on samples (subsets of populations), there is a component of uncertainty attached to researchers' conclusions (Vanderstoep and Johnston, 2009). This uncertainty stems from not being completely sure if the sample accurately represents or estimates the true nature of the population. The level of significance is the probability that a relationship between variables is not real, but rather due to chance factors. Most social science researchers use 0.05 as the level of significance to decide if a relationship is statistically significant (Vanderstoep and Johnston, 2009). Hence, for this study, various empirical statistical analyses mainly in the form of non-parametric tests are used, ranging from descriptive analysis, Kruskal-Wallis test, Mann-Whitney U test, factor analysis to more advance inferential statistics analysis such as Multiple



Regression analysis. The use of non-parametric test is due to the fact that this study did not follow random sampling in its data collection but also due to the nature of questions normality is not possible to achieve. The following section, hence, provides details on the particular tests used:

#### *Descriptive Statistics: Central Tendency and Spread*

The objective of descriptive analysis is to explain the nature of the data or, in other words, it is used to summarise, organise and describe the data (Pallant, 2007). The most common measure of central tendency is the mean, which is the arithmetic average of a set of numbers (Vanderstoep and Johnston, 2009). Means are important for descriptive studies because they provide information about the average participant's score on a measure. The mean of the particular variables was also calculated to establish general tendencies. In addition, as a measure of spread standard deviation is calculated.

The researcher has used SPSS version 19 for this study. In this study, frequency distributions were used together with the measurement of mean and standard deviations. The results of the distributions were analysed and described according to the common themes as presented in the descriptive analysis chapter (Chapter 6).

#### *Non-Parametric Statistical Tests*

It is argued that where the sampling is not random, the resulting samples will be potentially unrepresentative (Smith, 2003:66). Hence, if the assumptions about the population distribution are unwarranted, then parametric tests may be unreliable and non-parametric tests should be adopted. This is because the non-parametric tests are less stringent about assumptions compared to parametric ones. Field (2009:1330) outlined four assumptions about parametric data: normal distribution; variance should be homogenous; involving interval data; and observations should be independence from one another. Therefore, due to the nature of the data, non-parametric tests were utilised to analyse the data, which includes the following:

#### (i) Mann-Whitney U Test

The Mann-Whitney U test was used for the analysis of independent variables, which is a test that is equivalent to the independent  $t$ -test for the parametric statistics. It is used to identify the differences between two independent samples from the same populations (Field, 2005; Pallant, 2007: 220). In this research, the Mann-Whitney U test was used to determine whether there are any statistically significant differences in terms of the level of awareness, knowledge, expectations and perceptions between two groups within the category. For example, ‘do males and females differ in terms of their level of awareness on banking products and services?’

#### (ii) Kruskal-Wallis Test

The Kruskal-Wallis test is suitable for data that are collected on an ordinal scale or for interval data that do not meet  $F$ -test assumptions or prove to be inappropriate for a parametric test (Cooper and Schindler, 2001: 517). The function of this test is similar to Mann-Whitney U test but the only difference is Kruskal-Wallis measures the differences of independent samples for three or more groups (Field, 2005; Pallant, 2007). In this research, the Kruskal-Wallis test was used to determine whether there were any statistically significant differences in terms of the level of awareness, knowledge, expectations and perceptions across the various groups within the category. In other words, the tests were conducted to determine whether there were significant differences for the ‘age group’, ‘income level’, ‘education level’, and ‘relationship durations’ categories.

#### (iii) Factor Analysis

Factor analysis is a common term for several specific computational techniques. Field (2005) defines factor analysis as “a multivariate technique for identifying whether the correlations between a set of observed variables stem from their relationship to one or more latent variables in the data”. While Cooper and Schindler (2001: 591) defines factor analysis as “techniques that have the objective of reducing to a manageable number many variables that belong together and have overlapping measurement characteristics”. In other words, it is a data reduction technique that helps to reduce or

summarise large sets of variables into smaller and manageable set of factors or component (Pallant, 2007).

However, a test on the data that have been collected needs to be performed before factor analysis can proceed. It is suggested that the Kaiser-Meyen-Olkin (KMO) and the Barlett test have to be done (Field, 2005). It is also suggested that factor analysis can be performed if the Bartlett test is significant and the KMO sampling adequacy is far greater than 60% (0.6).

In this research, factor analysis is used on two occasions. First, it is used to reduce the set of 10 related variables of bank patronage into a smaller number of factors that are more meaningful. Second, it is used to determine the smaller common factors from the 7 dimensions of the service quality. The details of the analysis are discussed extensively in the respective analysis in Chapters 7 and 8. Subsequently, the results were used with other analysis methods such as comparing the mean value for each factor in order to obtain more significant conclusions.

#### (iv) Stepwise Multiple Regression Analysis

It is an extension of bivariate linear regression models (Cooper and Schindler, 2001: 603). The multiple regression is often selected when a researcher is interested in explaining or predicting a dependent variable from a set of independent variables. In addition, it also allows the independent variables to be taken from the categorical data, continuous data or combination of both (Pallant, 2007). The purpose of a multiple regression analysis is to provide information on the statistical significance of the independent variables, and to predict the significant independent variables that may influence the outcome of the categorical dependent variable. In this research, multiple regression is used to identify the significant independent variables that constituted strong predictors to customers' satisfaction.

#### (v) Correlation Coefficient

Correlation coefficient varies over a range of +1 through 0 to -1, which reveals the magnitude and direction of relationship (Cooper and Schindler, 2001: 533). In other words, it explains the degree by which variables move in unison or opposition. In this study, the correlation coefficient was used to identify the relationship between service

quality performance (SQP) and banks' financial performance using return on asset (ROA) and return on equity (ROE).

#### *Qualitative Data Analysis Methods*

In addition to quantitative methods as described above, this study also benefited from qualitative data analysis methods method in the form of interpretative and descriptive methods. The presentation of finding produced from the statistical tests are important but is not sufficient; and attempt has to be made to give further meaning to the results in responding to 'how', 'why' and 'so what' questions. This essentialises the need to make meaning from the statistical results in a socially constructive manner. Thus, interpretative and descriptive methods are used to develop meaning in this study out of the statistical findings.

### **5.7 CONCLUSION**

This chapter comprehensively discussed the research framework and methodology used in this study as well as the research process. It began with an illustration of the research design and the research strategy. This research used qualitative methodology, while the research method is constructed as triangulation including quantitative and qualitative methods. Next, it discussed the hypotheses development spiralling around the expectations and perceptions of customers towards service quality management of Islamic and conventional banks in Malaysia. As discussed in detail, primary data was gathered by means of survey questionnaires. The chapter further discussed related issues such as the population and sampling identification, questionnaire instrument development, data collection mode, data validity and reliability and data analysis techniques. In conclusion, the data collection process was considered as successful based on the identified research design and research planning.

## **Chapter 6**

### **Exploring the Customers' Expectations and Perceptions of Bank's Service Quality: A Descriptive Analysis**

#### **6.1 INTRODUCTION**

This chapter is a continuation of the methodology chapter, which analysed the respondents' expectations, perceptions, and attitudes through a comparative analysis between several identified groups. Furthermore, this study also considers some determinants and factors, which contribute to the respondents' awareness and knowledge concerning the products and services of Islamic and conventional banks.

The chapter is divided into six sections. Following the first section of introduction, is section 6.2: Profiles of the respondents; Section 6.3: Respondents' awareness and knowledge about products and services offered by the banks, and patronage factors influencing the customers; Section 6.4: Respondents' expectations and perceptions on service quality of the banks; Section 6.5: Comparison of the mean of the respondents' responses to the modified SERVQUAL dimensions; and finally Section 6.6: Summary of this chapter.

Section 6.2 discusses the respondents' profiles such as gender, age, income level, level of education, types of Islamic bank, local-owned bank and foreign-owned bank, and the relationship duration. In Section 6.3, the chapter is further divided into two components, namely 'awareness and knowledge of products and services offered by the conventional and Islamic banks', and 'the analysis of various patronage factors that influence the customers to open an account with conventional and Islamic banks'. The aim is to determine whether there are any consistent reasons for selecting their existing banks. In Section 6.4, the main focus of the discussion is to analyse the mean and standard deviations for each entity or statement of the modified SERVQUAL. Section 6.5 compares the mean of the respondents' responses to the service quality expectations and perceptions. The goal is to have a comparative understanding of the mean of the sampled banks regarding the service quality expectation and perception. Finally, Section 6.6 summaries the overall analysis and findings.

## 6.2 PROFILES OF THE RESPONDENTS

This section presents the respondents' characteristics and profiles using a descriptive analysis to describe the level of service quality of the conventional and Islamic banks. The analysis will use 'percentages' as the tool to describe the data.

The analysis begins with the demographic characteristics such as list of the banks, gender, age, marital status, ethnicity, religion, education, income level, occupation, duration of their relationship with the banks, existing accounts with other banks and banking facilities use.

**Table 6.1: Profiling the Customers of Conventional and Islamic Banks**

List of Banks	Frequency	Valid %	Cumulative %
BIMB	170	18.1	18.1
CIMB Bank Berhad	137	14.6	32.7
Malayan Banking Berhad	118	12.5	45.2
Maybank Islamic	80	8.5	53.7
CIMB Islamic	68	7.2	60.9
Public Bank Berhad	62	6.6	67.5
BMMB	46	4.9	72.4
Am Bank Berhad	28	3.0	75.4
Al-Rajhi	22	2.3	77.7
RHB Islamic	20	2.1	79.8
Am Islamic	20	2.1	81.9
RHB Bank Berhad	18	1.9	83.8
Affin Islamic	16	1.7	85.5
Public Islamic	16	1.7	87.2
Bank Simpanan Nasional	14	1.5	88.7
Affin Bank Berhad	13	1.4	90.1
HSBC Malaysia Berhad	11	1.2	91.3
EON Bank Berhad	10	1.1	92.4
Hong Leong Bank Berhad	9	1.0	93.4
Citibank Berhad	9	1.0	94.4
United Overseas Bank Berhad	9	1.0	95.4
Hong Leong Islamic	8	0.9	96.3
HSBC Amanah	7	0.7	97.0
EONCAP Islamic	5	0.5	97.5
Standard Chartered Berhad	5	0.5	98.0
OCBC Bank Berhad	5	0.5	98.5

OCBC Al-Amin	5	0.5	99.0
Standard Chartered Saadiq	4	0.4	99.4
The Bank of Nova Scotia	3	0.3	99.7
Alliance Bank Berhad	2	0.2	99.9
Bangkok Bank Berhad	1	0.1	100
<b>Total</b>	<b>941</b>	<b>100.0</b>	

Table 6.1 shows the statistics of the sample segments according to the banks the respondent deal with. The total of banks sampled was 31 banks. A total of 941 out of 982 questionnaires were suitable and valid for analysis. 454 or 48.2% are conventional banks' customers, and 487 or 51.8% are Islamic banks' customers. The distribution of the respondents based on category was almost equal. The approach to have nearly equal numbers of respondents was deliberate in order to generate comparable results.

As depicted in Table 6.1, the highest total respondents were from Bank Islam Malaysia Berhad (BIMB) which constituted of 18.1% of the samples. BIMB is the pioneering Islamic bank in Malaysia which has existed since 1983. In addition, the samples consisted of local-owned and foreign-owned conventional and Islamic banks (Table 6.2 and Table 6.3). The Islamic banks were further categorized as stand-alone and Islamic subsidiaries bank (Table 6.3).

**Table 6.2: Profiling the Local-owned and Foreign-owned Conventional Banks**

Local Banks	Frequency	%	Foreign Banks	Frequency	%
CIMB Bank	137	14.55	HSBC Bank	11	1.17
Maybank Berhad	118	12.54	United Overseas Bank	9	0.96
Public Bank	62	6.58	Citibank	9	0.96
Ambank Berhad	28	2.98	OCBC Bank	5	0.53
RHB Bank Berhad	18	1.91	Standard Chartered Bank	5	0.53
Bank Simpanan Nasional	14	1.49	The Bank of Nova Scotia	3	0.31
Affin Bank	13	1.38	Bangkok Bank	1	0.10
EON Bank	10	1.06			
Hong Leong Bank	9	0.96			
Alliance Bank	2	0.21			
<b>Total</b>	<b>411</b>	<b>43.67</b>	<b>Total</b>	<b>43</b>	<b>4.56</b>

*Note:* All the estimations are based on the total number of observations.

Table 6.2 presents the total number of respondents from the local-owned and foreign-owned conventional banks in Malaysia. 10 locally-owned banks and 7 foreign-owned

conventional banks were included in the study. The highest total number of respondents from the locally-owned conventional bank was CIMB Bank (14.55 %) followed by Maybank Berhad (12.54%), Public Bank Berhad (6.58%), Ambank Berhad (2.98%), RHB Bank Berhad (1.91%), Bank Simpanan Nasional (1.49%), Affin Bank Berhad (1.38%), EON Bank (1.06%), Hong Leong Bank (0.96%), and Alliance Bank (0.21%).

On the other hand, the highest percentage from the foreign-owned conventional bank was HSBC Bank with 1.17%, followed by United Overseas Bank (0.96%), Citibank (0.96%), OCBC Bank (0.53%), Standard Chartered Bank (0.53%), The Bank of Nova Scotia (0.31%), and Bangkok Bank Berhad (0.10%).

**Table 6.3: Profiling the Stand-Alone and Islamic Subsidiaries of Islamic Banks**

Type of Islamic Bank	Local Banks	Frequency	%	Foreign Banks	Frequency	%
Stand-Alone	BIMB	170	18.1	Al-Rajhi Bank	22	2.33
	BMMB	46	4.9			
<b>Total Stand-Alone</b>		<b>216</b>	<b>23</b>		<b>22</b>	<b>2.34</b>
Islamic Subsidiaries	Maybank Islamic	80	8.5	HSBC Amanah	7	0.74
	CIMB Islamic	68	7.2	OCBC Al-Amin	5	0.53
	Am Islamic Bank	20	2.1	Standard Chartered Saadiq	4	0.43
	RHB Islamic	20	2.1			
	Public Islamic	16	1.7			
	Affin Islamic	16	1.7			
	Hong Leong Islamic	8	0.9			
	EONCAP Islamic	5	0.5			
<b>Total Islamic Subsidiaries</b>		<b>233</b>	<b>24.76</b>		<b>16</b>	<b>1.70</b>
	<b>Total</b>	<b>449</b>	<b>47.76</b>	<b>Total</b>	<b>38</b>	<b>4.04</b>

*Note:* All the estimation is based on the total number of observations.

Table 6.3 shows that a majority of the respondents for Islamic banks are from locally-owned banks which represented 47.76 % of the sample, while 4.04% are from foreign-owned Islamic banks. Bank Islam Malaysia Berhad (BIMB) (18.1%) and Bank Muamalat Malaysia Berhad (BMMB) (4.9%) are the stand-alone Islamic banks that



are locally owned, whereas Al-Rajhi (2.33%) is the only stand-alone bank from the foreign-owned category. The rest of the banks such as Maybank Islamic (8.5%), CIMB Islamic (7.2%), AM Islamic (2.1%), RHB Islamic (2.1%), Public Islamic (1.7%), Affin Islamic (1.7%), Hong Leong Islamic(0.9%) and EONCAP Islamic (0.5%) are from Islamic subsidiaries that are locally owned. As for HSBC Amanah (0.74%), OCBC Al-Amin (0.53%) and Standard Chartered Saadiq (0.43%), they are Islamic subsidiaries from the foreign-owned category.

**Table 6.4: Profiling the Gender, Age and Marital Status of the Respondents**

<b>Gender</b>		<b>Frequency</b>	<b>%</b>	<b>Valid %</b>	<b>Cumulative %</b>
Valid	Female	526	55.9	55.9	55.9
	Male	415	44.1	44.1	100
	<b>Total</b>	<b>941</b>	<b>100.0</b>	<b>100.0</b>	
<b>Age</b>		<b>Frequency</b>	<b>%</b>	<b>Valid %</b>	<b>Cumulative %</b>
Valid	Below 20	14	1.5	1.5	1.5
	21-30	553	58.8	58.8	60.3
	31-40	260	27.6	27.6	87.9
	41-50	76	8.1	8.1	96.0
	Above 50	38	4.0	4.0	100.0
	<b>Total</b>	<b>941</b>	<b>100.0</b>	<b>100.0</b>	
<b>Marital Status</b>		<b>Frequency</b>	<b>%</b>	<b>Valid %</b>	<b>Cumulative %</b>
Valid	Single	472	50.2	50.2	50.2
	Married	453	48.1	48.1	98.3
	Widow / Divorcee	16	1.7	1.7	100.0
	<b>Total</b>	<b>941</b>	<b>100.0</b>	<b>100.0</b>	

The first background category that will be described is the respondents' gender. As depicted in Table 6.4, the sample study consisted of 55.9% female respondents, and 44.1% male respondents from the total of 941 usable questionnaires distributed.

Secondly, in terms of age, the respondents mainly came from the youth category with 86.4% of their age range from 21-40. As seen in Table 6.4, a majority of them were in the age group of 21-30 years of age, contouring 58.8% of the whole sample, followed by the age group of 31-40 (27.6%), and the age group of 41-50 years (8.1%). The two remaining age groups were considered insignificant because they constituted only 1.5% and 4% for the age groups of '20 and below' and 'above 50' respectively. The

data indicated that a majority of the banks' customers are from the youth category, which may be explained by the fact that they are in the stage of tertiary education or have already completed their studies and started working, which receive education loan or wages either as income earners or by managing a business, and therefore, need means to safeguard their cash.

The next category of the background variables is marital status. From the survey result, 50.2% of the samples claimed to be single, while 48.1% are married and 1.7% are divorcees/widows. Based on these survey results, the findings suggest that the majority of the 'single' respondents actively dealt with the banking services.

**Table 6.5: Profiling the Ethnicity and the Religion of the Respondents**

Ethnicity		Frequency	%	Valid %	Cumulative %
Valid	Malay	873	92.8	92.8	92.8
	Chinese	34	3.6	3.6	96.4
	Indian	27	2.9	2.9	99.3
	Others	7	0.7	0.7	100.0
	<b>Total</b>	<b>941</b>	<b>100.0</b>	<b>100.0</b>	
Religion		Frequency	%	Valid %	Cumulative %
Valid	Muslim	878	93.3	93.3	93.3
	Buddhist	28	3.0	3.0	96.3
	Hindu	25	2.7	2.7	98.9
	Christian	9	1.0	1.0	99.9
	Others	1	0.1	0.1	100.0
	<b>Total</b>	<b>941</b>	<b>100.0</b>	<b>100.0</b>	

The following two categories (i.e. ethnicity and religion) can be described simultaneously. They have a very strong relationship with each other. In Malaysia, Malay ethnic group are Muslim, whereas the majority of the Chinese ethnic group embraces Buddhism, while Indian ethnic group embraces Hinduism.

As stated in Table 6.5, 92.8% of the respondents' ethnicity is Malay followed by Chinese (3.6%), Indian (2.9%) and other ethnicity at 0.7 %.The examination of respondents' religion also revealed that a majority of the respondents are Muslim which consist of 93.3%, followed by Buddhist (3.0%), Hindu (2.7%), Christian (1.0%) and other religion (0.1%).

It should be noted that Malays are the majority ethnic group with Islam as the main religion. Based on these results, Malay ethnic and Muslim faith form a substantial number of the respondents which constituted 92.8% and 93.3% respectively. The results suggest that the distribution of ethnicity and religion corresponds to each other. Nevertheless, it is worth noting that the sample is not representative of the whole population.

**Table 6.6: Profiling the Monthly Income Level of the Respondents**

Monthly Income Level		Frequency	%	Valid %	Cumulative %
Valid	RM 1,000 and below	102	10.8	11.1	11.1
	RM 1,001-RM 3,000	623	66.2	67.5	78.5
	RM 3,001-RM 5,000	142	15.1	15.4	93.9
	RM 5,001-RM 10,000	40	4.3	4.3	98.3
	RM 10,001-RM 20,000	11	1.2	1.2	99.5
	RM 20,001 and above	5	0.5	0.5	100.0
	<b>Total</b>	<b>923</b>	<b>98.1</b>	<b>100.0</b>	
Missing	0	18	1.9		
<b>Total</b>		<b>941</b>	<b>100.0</b>		

The next category of the background variables is the monthly income level. Table 6.6 shows that a majority of the respondents have a monthly income between RM 1,001-RM 3,000 (67.5%). This was followed by 15.4% who have income within the range of RM 3,001-RM 5,000; 11.1% earning of RM 1,000 and below; 4.3% within the range of RM 5,001-RM 10,000 and 1.2% within the range of RM 10,001- RM 20,000. On the other hand, only a minority of the sample (0.5%) earned more than RM 20,001 and above per month. It should, therefore, be noted that this survey was dominated mainly by the middle class individuals.

**Table 6.7: Profiling the Education Level of the Respondents**

Education Level		Frequency	%	Valid %	Cumulative %
Valid	Primary/Secondary School	226	24.0	24.0	24.0
	College Diploma/ Matriculation/ A-Level	252	26.8	26.8	50.8
	Bachelor	380	40.4	40.4	91.2
	Professional Qualification	15	1.6	1.6	92.8

	Postgraduate	58	6.2	6.2	98.9
	Others	10	1.1	1.1	100.0
	<b>Total</b>	<b>941</b>	<b>100.0</b>	<b>100.0</b>	

The next category is the education level. Table 6.7 shows the respondents' education level in order to ascertain whether this level had any substantial effect on the customers' expectations and perceptions of service quality in the bank they deal with. Out of the total 941 respondents who revealed their educational background, most of the respondents hold a bachelor's degree (40.4%), 26.8% have a diploma certificate, 24% graduated from secondary schools, 6.2% are from postgraduate (master and PhD holders), 1.6% hold a professional qualification and the lowest was from other type of qualification (certificate) with only 1.1%.

**Table 6.8: Profiling the Respondents' Existing Accounts with Other Banks**

Existing accounts with other banks		Frequency	%	Valid %	Cumulative %
Valid	One Islamic bank and one conventional bank	289	30.7	30.7	30.7
	Only Islamic bank	237	25.2	25.2	55.9
	More than one Islamic banks and one conventional bank	184	19.6	19.6	75.5
	More than one Islamic bank	134	14.2	14.2	89.7
	Only conventional bank	38	4.0	4.0	93.7
	More than one conventional banks	31	3.3	3.3	97
	More than one conventional banks and one Islamic bank	28	3.0	3.0	100
	<b>Total</b>	<b>941</b>	<b>100.0</b>	<b>100.0</b>	

The next category of background variable is whether the respondents have an account with other type of bank. For the Islamic banks' questionnaire (Set 1), the customers were asked besides having an account with the Islamic bank, whether they have an account with conventional bank; or an account with other Islamic bank; or an account with conventional bank and in the same time having an account with other Islamic bank; or they do not have any account with other bank. The same goes for the conventional banks' questionnaire (Set 2). The respondents were asked besides having an account with the conventional bank, whether they have an account with Islamic

bank; or an account with other conventional bank; or an account with other conventional bank and in the same time having an account with Islamic bank; or they do not have any account with other bank.

As indicated in Table 6.8, a majority of the respondents have account with one Islamic bank and one conventional bank (30.7%). Furthermore, 25.2% of the respondents have an account with only one Islamic bank, followed by 19.6% of the participants having an account with more than one Islamic bank and one conventional bank. On the other hand, only 3.0% of the samples have an account with more than one conventional bank and one Islamic bank.

It should be noted that, most of the respondents have an account with Islamic bank and conventional bank, which mirrors Malaysian dual banking system. Although Islamic banking was introduced thirty years ago, the government and the general public are very supportive towards it.

**Table 6.9: Profiling the Time Duration in Dealing with the Bank**

Relationship Duration		Frequency	%	Valid %	Cumulative %
Valid	Less than 1 Year	61	6.5	6.5	6.5
	1-3 years	186	19.8	19.8	26.2
	3-5 years	228	24.2	24.2	50.5
	More than 5 years	466	49.5	49.5	100.0
	<b>Total</b>	<b>941</b>	<b>100.0</b>	<b>100.0</b>	

The following background category shows the time duration the respondents deal with their bank. Table 6.9 shows that 49.5% of the sample had been dealing with the same bank for more than five years, while 24.2% had dealt with the same bank for three to five years. 19.8% had been dealing with the same bank for one to three years. On the other hand, a mere 6.5% had dealt with the same bank for less than a year. However, it can be noted that a majority of the respondents have had well-established relationship with their banks as measured by the time duration. The result also revealed that most of the respondents were quite loyal to their current bank.

**Table 6.10: Profiling the Occupation of the Respondents**

Occupation		Frequency	%	Valid %	Cumulative %
Valid	Private Sector Employee	314	33.4	33.5	33.5
	Admin. Assistant / Officer/ Clerk	277	28.4	29.7	63.2
	Professional (Lawyer, Engineer, Accountant, Doctor, etc.)	76	8.1	8.1	71.3
	Student	65	6.9	7.0	78.3
	Academician	59	6.3	6.3	84.6
	Nurse	34	3.6	3.6	88.2
	Technician/ Mechanic	35	3.8	3.8	92.0
	Bank Employee/ Businessmen	18	2.0	2.0	94.0
	Housewife/ Retired	8	0.8	0.8	94.8
	Unemployed	2	0.2	0.2	95.0
	Soldier	1	0.1	0.1	95.1
	Others	46	4.9	4.9	100
	<b>Total</b>	<b>935</b>	<b>99.4</b>	<b>100.0</b>	
Missing	0	6	0.6		
<b>Total</b>		<b>941</b>	<b>100.0</b>		

Table 6.10 shows the occupation of the respondents. This information aimed to identify how the respondents' occupation could affect their expectations and perceptions of service quality. A majority of the respondents (33.5%) work in a private sector, followed by 29.7% of them work as administration assistant/ officer / clerk , and leaving a very modest percentage ranking between 0.1% to 8.1% which represent professional (8.1%), student (7.0%), academician (6.3%), nurse (3.6%), technician and mechanic (3.8%), bank employee and businessman (2.0%), housewife and retired customers (0.8%), unemployed (0.2%) and others (4.9%).

To sum up, the following group represents the majority of the respondents: they are females, aged between 21-30, single, of Malay ethnicity, Muslim, earning in the range of RM 1,001 to RM 3,000, holding bachelor degrees as the highest level of education, having account with one Islamic bank and one conventional bank in the same time, have well established relationship with their banks (of more than five years), and finally being employed in private sector.

### 6.3 RESPONDENTS' AWARENESS AND KNOWLEDGE OF BANKING SERVICES

This section presents the participants' responses in accordance with their awareness and knowledge of products and services offered by conventional and Islamic banks. It is expected that customers of these banks possess some levels of awareness and knowledge about the products and services offered by these banks.

#### 6.3.1. Awareness and Knowledge on Products and Services offered by Islamic and Conventional Banks

The awareness and knowledge of the banking products are important for both the customers and providers. The customers need to know whether the products and services are right for them and is it worth for their money, while the providers need to educate the customers about their products and services in order to have revenue and to be sustainable in the future. Therefore, this section assesses the respondents' level of awareness and knowledge of the banking products and services.

**Table 6.11: Distribution of Responses on Awareness and Knowledge of Products and Services of Islamic Banks**

Product/ Service		Frequency	%
<i>Wadiah</i>	Yes	329	67.6
	No	158	32.4
	Total	487	100
<i>Rahnu</i>	Yes	305	62.6
	No	182	37.4
	Total	487	100
<i>Mudharabah</i>	Yes	294	60.4
	No	193	39.6
	Total	487	100
<i>Murabahah</i>	Yes	197	40.5
	No	290	59.5
	Total	487	100
<i>Bai'Bithaman Ajil</i>	Yes	168	34.5
	No	319	65.5
	Total	487	100
<i>Musyarakah</i>	Yes	136	27.9
	No	351	72.1
	Total	487	100

<b><i>Ijarah</i></b>	Yes	126	25.9
	No	361	74.1
	Total	487	100
<b><i>Bai' Al Inah</i></b>	Yes	113	23.2
	No	374	76.8
	Total	487	100
<b><i>Wakalah</i></b>	Yes	99	20.3
	No	388	79.7
	Total	487	100
<b><i>Qard</i></b>	Yes	68	14
	No	419	86
	Total	487	100
<b><i>Bai' Al Salam</i></b>	Yes	66	13.6
	No	421	86.4
	Total	487	100
<b><i>Sukuk</i></b>	Yes	63	12.9
	No	424	87.1
	Total	487	100
<b><i>Al Ijarah Thumma Al Bai'</i></b>	Yes	54	11.1
	No	433	88.9
	Total	487	100
<b><i>Kafalah</i></b>	Yes	52	10.7
	No	435	89.3
	Total	487	100
<b><i>Bai' Al Dayn</i></b>	Yes	44	9
	No	443	91
	Total	487	100
<b><i>Hiwalah</i></b>	Yes	44	9
	No	443	91
	Total	487	100
<b><i>Ujrah</i></b>	Yes	41	8.4
	No	446	91.6
	Total	487	100
<b><i>Tawarruq</i></b>	Yes	41	8.4
	No	446	91.6
	Total	487	100
<b><i>Istisna'</i></b>	Yes	40	8.2
	No	447	91.8
	Total	487	100
<b><i>Sarf</i></b>	Yes	26	5.3
	No	461	94.7
	Total	487	100

Note: The above estimations are based on the respondents of Islamic banks only (total of 487).

Table 6.11 presents the frequency and percentage distribution of awareness and knowledge about products and services of Islamic Banks. A total of 67% of the respondents are aware and have the knowledge of *wadiah*, followed by *rahnu* (62.6%), *mudharabah* (60.4%) and *murabahah* (40.5%).

The percentage of respondents that are aware and have knowledge of the other products and services offered by Islamic banks range from 5.3% to 34.3%. These



includes *bai' bithaman ajil* (34.5%), *musyarakah* (27.9%), *ijarah* (25.9%), *bai' al inah* (23.2%), *wakalah* (20.3%), *qard* (14%), *bai' al salam* (13.6%), *sukuk* (12.9%), *al ijarah thumma al bai'* (11.1%), *kafalah* (10.7%), *bai' al dayn* (9%), and *hiwalah* (9%).

On the other hand, 8.4% of the respondents have the knowledge of both *ujrah* and *tawarruq*, followed by *istisna'* (8.2%) and only 5.3% are aware and have the knowledge about *sarf*.

The result shows that the respondents' awareness and knowledge of Islamic banking products and services are still low. From the total of 20 types of products and services, only 3 products or services had the percentage of more than 60%. The remaining 17 products and services had less than 41%. This result revealed that most of the respondents have less awareness and knowledge about most of the Islamic banking products and services.

One of the reasons may be because of the Arabic word used in the product, as in Malaysia, the main language is Malay language followed by English. Another reason is the use of the product itself. The highest three products and services are the most common products used in Islamic bank. *Wadiah*, *rahnu* and *mudharabah* are equivalent to saving account, pawn services, and investment account in the conventional banks. This is supported by the fact that most of the respondents are not corporate users. Most of them dealt with Islamic banks only for personal purposes.

**Table 6.12: Distribution of Responses on Awareness and Knowledge of Products and Services of Conventional Banks**

Product/ Service		Frequency	%
Saving Account	Yes	448	98.7
	No	6	1.3
	Total	454	100
Credit Card	Yes	388	85.5
	No	66	14.5
	Total	454	100
Vehicle Financing	Yes	386	85.0
	No	68	15.0
	Total	454	100

<b>Personal Loan</b>	Yes	381	83.9
	No	73	16.1
	Total	454	100
<b>Current Account</b>	Yes	372	81.9
	No	82	18.1
	Total	454	100
<b>Home Loan</b>	Yes	369	81.3
	No	85	18.7
	Total	454	100
<b>Internet Banking</b>	Yes	359	79.1
	No	95	20.9
	Total	454	100
<b>Insurance</b>	Yes	339	74.7
	No	115	25.3
	Total	454	100
<b>Receivable Finance</b>	Yes	321	70.7
	No	133	29.3
	Total	454	100
<b>Fixed Deposit</b>	Yes	302	66.5
	No	152	33.5
	Total	454	100
<b>Education Loan</b>	Yes	281	61.9
	No	173	38.1
	Total	454	100
<b>Interest Rate</b>	Yes	279	61.5
	No	175	30.5
	Total	454	100
<b>Foreign Exchange</b>	Yes	271	59.7
	No	183	40.3
	Total	454	100
<b>Financing</b>	Yes	233	51.3
	No	221	48.7
	Total	454	100
<b>Hire Purchase</b>	Yes	229	50.4
	No	225	49.6
	Total	454	100
<b>Unit Trust</b>	Yes	225	49.6
	No	229	50.4
	Total	454	100
<b>Telephone Banking</b>	Yes	215	47.4
	No	239	52.6
	Total	454	100
<b>Wealth Management</b>	Yes	182	40.1
	No	272	59.9
	Total	454	100
<b>Bond</b>	Yes	166	36.6
	No	288	63.4
	Total	454	100
<b>Leasing</b>	Yes	152	33.5
	No	302	66.5
	Total	454	100
<b>Trustee Service</b>	Yes	139	30.6
	No	315	69.4
	Total	454	100
<b>Import and Export</b>	Yes	90	19.8
	No	364	83.2
	Total	454	100

Table 6.12 presents the frequency and percentage of awareness and knowledge of products and services offered by the conventional banks. 98.7% of the respondents were aware and had the knowledge of saving accounts, followed by credit card

(85.5%), vehicle financing (85.0%), personal loan (83.9%), current account (81.9%), and home loan (81.3%).

Furthermore, the percentage of respondents who were aware and had knowledge of other banking products such as internet banking, insurance, receivable finance, education loan, interest rate, foreign exchange, financing, hire purchase, unit trust, telephone banking and wealth management varied from 40.1%-79.1%. The lowest percentage was from those who were aware and had knowledge of bond (36.6%), leasing (33.5%), trustee service (30.6%) and the least was on import and export (19.8%).

The result suggested that most of the respondents from the conventional banks had a high awareness and knowledge of the conventional banks' products and services. 6 from the total of 22 products and services had a very good score of percentage ranging from 81.3% to 98.7%. This is because the products and services that had a good score of percentage were the most commonly used products and services in a conventional bank. As for another 12 products and services, they had secured a moderate percentage which ranged from 40.1% to 79.1%.

Whereas, from the 22 products or services, only 4 of the products and services had a percentage of lower than 40%. The reason for this lower percentage was because most of these products and services were rarely used by the respondents and were normally used by corporate customers or business persons.

### **6.3.2 Patronage Factors that Influence the Customers to Open an Account with a Bank**

This section reflects on the respondents' responses towards the patronage factors (i.e. 11 factors), including religious obligation, courteous and competent, customer service quality, location, convenience, internet banking, brand and image, attractive price of products and services, rate of return, no. of branch available and encouragement from family and friends. The responses to each of the variable were designed on a 5 Likert scale where 1= Not important at all, 2= Not important, 3= Neutral, 4= Important, 5=

Very important. The respondents had to rate each of the factors according to their liking (ranging from ‘not important at all’ to ‘very important’). Table 6.13 presents the frequency and mean results gathered during the fieldwork. The presentation of the descriptive analysis is shown according to the ranking based on the highest mean-value.

**Table 6.13: Mean Ranking for Patronage Factors (Islamic and Conventional Banks)**

Patronage Factors	N	Mean	Std. Deviation
Religious Obligation	487	4.57	.707
Courteous and Competent	941	4.48	.721
Customer Service Quality	941	4.46	.696
Location	941	4.30	.781
Convenience	941	4.27	.829
Internet Banking	941	4.26	.803
Brand & Image	941	4.24	.859
Attractive price of products and services	941	4.16	.837
Rate of Return	941	4.15	.831
No. of Branch Available	941	4.13	.821
Encouragement (Family & Friends)	941	3.58	.953
<b>Valid N (listwise)</b>	<b>11</b>		

Table 6.13 shows the overall ranking of the patronage factor according to the highest mean. The highest mean was from the ‘Religious Obligation’ factor. The mean value for this factor was 4.57, with a low standard deviation of 0.707. In general, this indicates that a majority of the Islamic banks’ respondents felt that their account must be according to *Shari’ah* principles, and the reason they opted for Islamic banking accounts was due to religious beliefs. However, it should be noted that this estimation was from the customers of Islamic banks (487 respondents) only.

The second highest mean was from the ‘internal’ factors which was courteous and competent personnel (mean: 4.48), and followed by customer service quality (mean: 4.46) which was ranked as third. The result implied that a high-quality of services provided by the bank’s employees played a very vital role in attracting the customers

to open an account with a particular bank. In addition, the data also highlighted the importance of facilities and services offered by the bank in order to create customers' satisfaction.

The lowest mean was from the 'external' factor which was encouragement from family and friend with a mean of 3.58 and a standard deviation of 0.953. It could be concluded that an encouragement from family and friend was not perceived as an important criteria for bank selection. The survey result suggested that this factor was insignificant to the patronage factor.

However, the ranking would be different if it was exclusively based on Islamic banks or conventional banks alone category. In the conventional banks category, the 'Religious Obligation' criterion was not included in the questionnaire. Thus, different criteria would have the highest mean.

**Table 6.14: Mean Ranking for Patronage Factors (Islamic Banks only)**

Patronage Factors	Mean	Std. Deviation
Religious Obligation	4.57	.707
Courteous and competent	4.43	.750
Brand & Image	4.42	.741
Customer Service Quality	4.40	.736
Convenience	4.25	.836
Internet banking	4.22	.818
Location	4.21	.795
No. of Branch available	4.03	.833
Price of product	3.99	.855
Rate of return	3.98	.856
Encouragement (F&F)	3.69	.928
Valid N (listwise)	11	

**Table 6.15: Mean Ranking for Patronage Factors (Conventional Banks only)**

Patronage Factors	Mean	Std. Deviation
Courteous and competent	4.53	.686
Customer Service Quality	4.52	.647
Location	4.39	.755
Price of product	4.35	.776
Rate of return	4.34	.763
Internet banking	4.29	.786

Convenience	4.28	.822
No. of Branch available	4.24	.794
Brand & Image	4.04	.931
Encouragement (F&F)	3.45	.966
<b>Valid N (listwise)</b>	<b>10</b>	

Table 6.14 and 6.15 show the mean for patronage factor of Islamic banks and conventional ones respectively. The results indicated that ‘Religious Obligation’ was the most important factor for Islamic banks’ customers and ‘Courteous and competent’ was the most important factor for conventional banks’ customers. The finding on the Islamic banks was expected earlier as most of the customers of Islamic banks are Muslim and they do concern about the religious obligation.

#### 6.4 CUSTOMERS’ EXPECTATIONS AND PERCEPTION ON SERVICE QUALITY OF BANKS

This section presents the respondents’ expectations and perceptions in accordance to the modified SERVQUAL dimensions. The modified SERVQUAL in this study contained seven dimensions (tangible, reliability, responsiveness, assurance, empathy, Islamic values and social responsibility). These dimensions were analysed using the mean comparison test.

**Table 6.16: Profiling the Respondents that Have Experienced Service Problem and whether the Problem is Satisfactorily Solved or Not**

Experienced Service Problem		Frequency	%	Valid %	Cumulative %
Valid	Yes	454	48.2	48.2	48.2
	No	487	51.8	51.8	100.0
	<b>Total</b>	<b>941</b>	<b>100.0</b>	<b>100.0</b>	
Satisfactorily Solved		Frequency	%	Valid %	Cumulative %
Valid	Yes	375	39.9	82.6	82.6
	No	79	8.4	17.4	100.0
	<b>Total</b>	<b>454</b>	<b>48.2</b>	<b>100.0</b>	
Missing	0	487	51.8		
<b>Total</b>		<b>941</b>	<b>100.0</b>		

In order to identify whether the respondents had ever experienced a service related problem with their bank, the study included questions in the questionnaire specifically to address this matter. Respondents were asked whether they ever experienced a service problem and whether the problem was satisfactorily solved. Table 6.16 presents the results with 454 or 48.2% respondents claimed that they experienced a service problem with their bank. It should be noted that nearly half of the respondents experienced a service problem with their bank.

In addition, from 454 respondents that experienced service problem, only 375 respondents or 82.6% stated that the problem was satisfactorily solved. While the remaining 79 respondents or 17.4% stated that the problem was not satisfactorily solved. It should be noted that even though most of the problem was satisfactorily solved, the ability of the bank's employees to solve the problem was not 100% achievable. Another reason might be the bank did not have adequate numbers of staff to serve or deal with the customers' problem.

**Table 6.17: Profiling the Cause of Service Quality Problem in a Bank**

<b>Equipment Failure</b>		<b>Frequency</b>	<b>%</b>	<b>Valid %</b>	<b>Cumulative %</b>
Valid	Yes	420	44.6	100.0	100.0
Missing	0	521	55.4		
<b>Total</b>		<b>941</b>	<b>100.0</b>		
<b>Lack of Personal Skills</b>		<b>Frequency</b>	<b>%</b>	<b>Valid %</b>	<b>Cumulative %</b>
Valid	Yes	359	38.2	100.0	100.0
Missing	0	582	61.8		
<b>Total</b>		<b>941</b>	<b>100.0</b>		
<b>Policies and Procedures</b>		<b>Frequency</b>	<b>%</b>	<b>Valid %</b>	<b>Cumulative %</b>
Valid	Yes	349	37.1	100.0	100.0
Missing	0	592	62.9		
<b>Total</b>		<b>941</b>	<b>100.0</b>		
<b>Communication breakdown</b>		<b>Frequency</b>	<b>%</b>	<b>Valid %</b>	<b>Cumulative %</b>
Valid	Yes	340	36.1	100.0	100.0
Missing	0	601	63.9		
<b>Total</b>		<b>941</b>	<b>100.0</b>		

<b>Inadequate no. of Staff</b>		<b>Frequency</b>	<b>%</b>	<b>Valid %</b>	<b>Cumulative %</b>
Valid	Yes	303	32.2	100.0	100.0
Missing	0	638	67.8		
<b>Total</b>		<b>941</b>	<b>100.0</b>		
<b>Lack of Values</b>		<b>Frequency</b>	<b>%</b>	<b>Valid %</b>	<b>Cumulative %</b>
Valid	Yes	229	24.3	100.0	100.0
Missing	0	712	75.7		
<b>Total</b>		<b>941</b>	<b>100.0</b>		
<b>Habit Developed Over Time</b>		<b>Frequency</b>	<b>%</b>	<b>Valid %</b>	<b>Cumulative %</b>
Valid	Yes	211	22.4	100.0	100.0
Missing	0	730	77.6		
<b>Total</b>		<b>941</b>	<b>100.0</b>		
<b>Cultural Barriers</b>		<b>Frequency</b>	<b>%</b>	<b>Valid %</b>	<b>Cumulative %</b>
Valid	Yes	133	14.1	100.0	100.0
Missing	0	808	85.9		
<b>Total</b>		<b>941</b>	<b>100.0</b>		

According to Table 6.17, customers responded to the eight causes of service quality problems in a bank by giving the highest score of percentage to equipment failure (44.6%), followed by lack of personal skills (38.2%), policies and procedures (37.1%), communication breakdown (36.1%), and inadequate number of staff (32.2%).

The three lowest score of percentage were from lack of values (24.3%), habit developed over time (22.4%) and cultural barriers (14.1%). It should be noted that most of the problems were caused by the failure of equipment which included cases such as computer system breakdown, insufficient money in the ATM, and server break down in the case of internet banking. This problem could be solved, if the bank had a better information technology (IT) back-up and support system.



**Table 6.18: Mean Analysis of the Tangible Dimension for Expectation of Service Quality**

Statements	N	Mean	Std. Deviation
The bank has modern looking equipments	941	4.72	.528
The bank brochures and forms are clear and easy to understand	941	4.55	.633
The bank' employees are neat-appearing	941	4.33	.753
The bank has visually appealing interior design and facilities	941	3.90	.828
Valid N (listwise)	941		
<b>Average Mean</b>		<b>4.38</b>	

Table 6.18 presents the results of the mean comparison test for the tangible dimension of the respondents' expectation. The response to each of the variable were designed on a 5 Likert scale where 1= Strongly disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly agree. This dimension had four constructs. The highest mean was 4.72 for the construct that the bank had modern looking equipments in it premises. The respondents, however, expressed a slightly dissatisfaction with the statement that the bank had visually appealing interior design and facilities with a mean of 3.90. Nevertheless, the average mean for this dimension was 4.38.

**Table 6.19: Mean Analysis of the Reliability Dimension for Expectation of Service Quality**

Statements	N	Mean	Std. Deviation
Customers' problems are promptly and sincerely solved	941	4.69	.558
Business transactions are accurate	941	4.66	.577
Application are processed on-time	941	4.64	.594
The employees of the bank insist on error-free records.	941	4.62	.604
Advertised promises are consistent with its performance	941	4.57	.623
Valid N (listwise)	941		
<b>Average Mean</b>		<b>4.64</b>	

As shown in Table 6.19, customers responded to the reliability statements by giving high mean value of 4.69 for believing that customers' problems were promptly and sincerely solved. The mean comparison test also showed a lower mean value among the rest of the reliability statements (4.57) for the question whether advertised

promises were consistent with their performance. The average mean for this dimension was 4.64.

**Table 6.20: Mean Analysis of the Responsive Dimension for Expectation of Service Quality**

Statements	N	Mean	Std. Deviation
The employees of the bank give customers prompt service	941	4.67	.587
The employees of the bank are willing to help their customers	941	4.62	.605
The employees of the bank are never too busy to respond to customers requests	941	4.57	.655
Customers are told when services will be performed	941	4.54	.646
Valid N (listwise)	941		
<b>Average Mean</b>		<b>4.6</b>	

Table 6.20 presents the mean test comparison for the responsive dimension expected by the respondents of this study. The respondents gave a high mean value of 4.67 for the statement ‘the employees of the bank give customers prompt service’. In contrast, the respondents gave a modest mean value of 4.54 to the statement which stated that the customers were told when services would be performed. The average mean for this dimension score was a mean value of 4.6.

**Table 6.21: Mean Analysis of the Assurance Dimension for Expectation of Service Quality**

Statements	N	Mean	Std. Deviation
Customers of the bank feel safe in their transaction	941	4.63	.586
The employees of the bank have the knowledge to answer customers’ questions	941	4.60	.587
The employees of the bank are courteous with customers	941	4.55	.607
The employees’ behavior instills confidence in customers	941	4.55	.623
Valid N (listwise)	941		
<b>Average Mean</b>		<b>4.58</b>	

Table 6.21 illustrates the respondents’ reaction towards statements formed to assess their expectations of assurance dimensions by giving the highest mean of 4.63 to the statement that customers of the bank feel safe in their transaction. On the other hand, only 4.55 was given as the mean value for two of the statements that had the lowest mean in this dimension. The statements were related to whether the employees of the

bank were courteous with customers and whether the employees' behaviour instilled confidence in customers. While the average mean for this dimension was 4.58.

**Table 6.22: Mean Analysis of the Empathy Dimension for Expectation of Service Quality**

Statements	N	Mean	Std. Deviation
The bank have their customer's best interest at heart	941	4.55	.624
The bank have operating hours convenient to all its customers	941	4.52	.630
The employees of the bank understand the specific needs of their customers	941	4.43	.648
The bank give their customers individual attention	941	4.27	.756
The employees of the bank give customers personal attention	941	4.23	.735
Valid N (listwise)	941		
<b>Average Mean</b>		<b>4.40</b>	

Table 6.22 shows that the respondents expressed their expectations when asked about the empathy dimension. The respondents highly valued the statement that 'the bank have their customer's best interest at heart' with a mean of 4.55. In contrast, the respondents gave a slightly lower mean value of 4.23 when expressing their expectations about the employees of the bank give customers' personal attention. However, the average mean value for this dimension was 4.23.

**Table 6.23: Mean Analysis of the Islamic Values Dimension for Expectation of Service Quality**

Statements	N	Mean	Std. Deviation
The Islamic bank provides banking services according to Islamic <i>Shari'ah</i>	487	4.59	.679
The Islamic bank' employees have knowledge on Islamic banking products and services	487	4.59	.635
The Islamic bank neither pays nor takes interest on savings and loan accounts	487	4.58	.721
The Islamic bank provides profit-sharing investment account	487	4.48	.684
The prices of the Islamic bank' products and services are competitive	487	4.48	.684
The Islamic bank have well known and trustworthy <i>Shari'ah</i> Advisory Board	487	4.44	.683
Valid N (listwise)	487		
<b>Average Mean</b>		<b>4.54</b>	

In Table 6.23, the respondents showed their expectation towards the Islamic values dimension. The highest mean of 4.59 was given to the statement 'Islamic bank provides banking services according to Islamic *Shari'ah*', in contrast, only 4.44 was

given as a mean value to ‘Islamic bank have well known and trustworthy *Shari’ah* Advisory Board’. And 4.54 was the average mean for this dimension.

**Table 6.24: Mean Analysis of the Social Responsibility Dimension for Expectation of Service Quality**

Statement	N	Mean	Std. Deviation
The bank is socially responsible	941	4.44	.726
Valid N (listwise)	941		
<b>Average Mean</b>		<b>4.44</b>	

Table 6.24 illustrates the respondents’ reaction towards the statement related to the social responsibility dimension. A mean value of 4.44 was given to the statement that the bank was socially responsible.

**Table 6.25: Mean Analysis of the Tangible Dimension for Perception of Service Quality**

Statements	N	Mean	Std. Deviation
The bank has modern looking equipments	941	4.29	.780
The bank’s employees are neat-appearing	941	4.01	.754
The bank’s brochures and forms are clear and easy to understand	941	4.00	.854
The bank has visually appealing interior design and facilities	941	3.76	.760
Valid N (listwise)	941		
<b>Average Mean</b>		<b>4.02</b>	

As shown in Table 6.25, customers responded to tangible statements by giving a high mean value of 4.29 for believing that the bank had modern looking equipments. The mean comparison test also showed a lower mean value among the rest of the tangible statements (3.76) for the question whether the bank had visually appealing interior design and facilities. The average mean for this dimension was 4.02.

**Table 6.26: Mean Analysis of the Reliability Dimension for Perception of Service Quality**

Statements	N	Mean	Std. Deviation
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Customers' problems are promptly and sincerely solved	941	4.18	.769
Business transactions are accurate	941	4.04	.852
Application are processed on-time	941	4.02	.879
The employees of the bank insist on error-free records.	941	3.99	.922
Advertised promises are consistent with its performance	941	3.95	.898
Valid N (listwise)	941		
<b>Average Mean</b>		<b>4.04</b>	

Table 6.26 presents the results of the mean comparison test for the tangible dimension of the respondents' perceptions. This dimension had five constructs. The highest mean was 4.18 for the construct that customers' problems were promptly and sincerely solved. The respondents, however, expressed a slightly dissatisfaction with the statement on the advertised promises were consistent with their performance with a mean of 3.95. Nevertheless, the average mean for this dimension was 4.04.

**Table 6.27: Mean Analysis of the Responsive Dimension for Perception of Service Quality**

Statements	N	Mean	Std. Deviation
The employees of the bank are willing to help their customers	941	3.97	.850
The employees of the bank give customers prompt service	941	3.91	.950
The employees of the bank are never too busy to respond to customers requests	941	3.89	.890
Customers are told when services will be performed	941	3.87	.928
Valid N (listwise)	941		
<b>Average Mean</b>		<b>3.91</b>	

Table 6.27 presents the mean test comparison for the responsive dimension by the respondents of this study. The respondents gave a mean value of below 4 for all constructs in this dimension. The highest mean value of 3.97 for the statement that stated the employees of the bank were willing to help their customers. In contrast, the respondents gave a modest mean value of 3.87 to the statement 'the customers are told when services will be performed'. The average mean for this dimension score was a mean value of 3.91.

**Table 6.28: Mean Analysis of the Assurance Dimension for Perception of Service Quality**

Statements	N	Mean	Std. Deviation
Customers of the bank feel safe in their transaction	941	4.10	.797

The employees of the bank are courteous with customers	941	4.02	.830
The employees of the bank have the knowledge to answer customers' questions	941	4.02	.840
The employees' behavior instills confidence in customers	941	3.97	.841
Valid N (listwise)	941		
Average Mean		4.03	

Table 6.28 illustrates the respondents' reaction towards statements formed to assess their perceptions of assurance dimensions by giving the highest mean of 4.10 to the statement 'customers of the bank feel safe in their transaction'. On the other hand, only 3.97 were given as the mean value for the statement that had the lowest mean in this dimension. The statement was related to whether the employees' behaviour instilled confidence in customers. While the average mean for this dimension was 4.03.

**Table 6.29: Mean Analysis of the Empathy Dimension for Perception of Service Quality**

Statements	N	Mean	Std. Deviation
The bank have their customer's best interest at heart	941	3.97	.863
The bank have operating hours convenient to all its customers	941	3.93	.885
The employees of the bank give customers personal attention	941	3.91	.878
The bank give their customers individual attention	941	3.79	.884
The employees of the bank understand the specific needs of their customers	941	3.71	.958
Valid N (listwise)	941		
Average Mean		3.86	

As illustrated in Table 6.29, the respondents expressed their perceptions when asked about the empathy dimension. The respondents highly valued the statement that stated the bank had their customer's best interest at heart with a mean of 3.97. Whereas, the respondents showed a slightly lower mean value of 3.71 when expressing their expectations about the employees of the bank understand the specific needs of their customers. However, the average mean value for this dimension was 3.86.

**Table 6.30: Mean Analysis of the Islamic Values Dimension for Perception of Service Quality**

Statements	N	Mean	Std. Deviation
The Islamic bank provides banking services according to Islamic <i>Shari'ah</i>	487	4.06	.850
The Islamic bank' employees have knowledge on Islamic banking products and services	487	4.04	.812
The Islamic bank neither pays nor takes interest on savings and loan accounts	487	4.01	.892
The Islamic bank provides profit-sharing investment account	487	4.00	.822
The Islamic bank have well known and trustworthy <i>Shari'ah</i> Advisory Board	487	3.98	.816
The prices of the Islamic bank' products and services are competitive	487	3.94	.799
Valid N (listwise)	487		
<b>Average Mean</b>		<b>4.01</b>	

According to Table 6.30, the respondents showed their perceptions towards the Islamic values dimension. The highest mean of 4.06 was given to the statement about the Islamic bank providing banking services according to Islamic *Shari'ah*. On the other hand, only 3.94 was given as a mean value to the statement about the prices of the Islamic bank' products and services were competitive. Meanwhile, the average mean for this dimension was 4.01.

**Table 6.31: Mean Analysis of the Social Responsibility Dimension for Perception of Service Quality**

Statements	N	Mean	Std. Deviation
The bank is socially responsible	941	3.94	0.855
Valid N (listwise)	941		
<b>Average Mean</b>		<b>3.94</b>	

In Table 6.31, the respondents showed their perception towards the social responsibility dimension. A mean of 3.94 was given to the statement about the bank was socially responsible.

**Table 6.32: Average Mean of the Service Quality Dimensions in terms of Expectations and Perceptions (Combination of Conventional and Islamic banks)**

Service Quality Dimensions	Average Mean for Expectation	Average Mean for Perception	Asymp. Sig (Wilcoxon Signed Ranks Test)
Reliability	4.64	4.04	0.000
Responsiveness	4.60	3.91	0.000
Assurance	4.58	4.03	0.000
Islamic Values	4.54	4.01	0.000
Social Responsibility	4.44	3.94	0.000
Empathy	4.40	3.86	0.000
Tangible	4.38	4.02	0.000

Table 6.32 presents a comparison of average mean of the expectation and perception for the entire modified SERVQUAL dimension. Wilcoxon Signed Ranks test was used to identify whether there were differences between customers' perceptions and expectations in relation to the service quality dimensions. The result for the Wilcoxon Signed Ranks Test showed that all the p-values of the test are 0.000, which was less than 0.05 indicating that there are significant differences in the expectations and perceptions of the respondents.

For the expectation, the reliability dimension scored the highest average mean of 4.64, while the lowest score was the tangible dimension with a mean of 4.38. On the other hand, the reliability dimension was also scored the highest average mean of 4.04 in the perception part. In contrast, the lowest score for the average mean for the perception was the empathy dimension with a mean of 3.86.

In conclusion, the respondents gave a higher score for the average mean (for both expectation and perception) to reliability dimensions. It showed a consistent result for the respondents' expectations and the real perceptions by the respondents. However, the lowest score of the expectations and perceptions were from different dimensions. Even though the lowest score of mean for the expectation was from tangible



dimension (4.38), that score was still higher from the highest score of mean from the perception part, which was the reliability dimension (4.04).

The result suggested that, in reality, respondents' believed that they could not rely on the bank's employees and that the employees still lacked the empathy skills which reflect that they did not understand the customers' need. Thus, to further improve the service quality, an adequate training on how to develop the soft skills for the bank's employees is urgently needed.

**Table 6.33: Average Mean of the Service Quality Dimensions in terms of Expectations and Perceptions (Islamic banks only)**

Service Quality Dimensions	Average Mean for Expectation	Average Mean for Perception
Reliability	4.60	4.01
Responsiveness	4.56	3.91
Assurance	4.55	4.03
Islamic Values	4.53	4.00
Social Responsibility	4.49	3.97
Empathy	4.37	3.89
Tangible	4.35	3.99

**Table 6.34: Average Mean of the Service Quality Dimensions in terms of Expectations and Perceptions (Conventional banks only)**

Service Quality Dimension	Average Mean for Expectation	Average Mean for Perception
Reliability	4.66	4.06
Responsiveness	4.63	3.90
Assurance	4.62	4.02
Empathy	4.43	3.82
Social Responsibility	4.38	3.90
Tangible	4.34	4.03

The study furthered classified the average mean into Islamic banks only and conventional banks only to identify whether there were any significant difference with the results of the average mean for the banks as a whole. Table 6.33 and 6.34

present a comparison of average mean of the expectation and perception for Islamic banks only and average mean of the expectation and perception for conventional banks only, respectively. For the expectation part, the ‘Reliability’ dimension scored the highest average mean for both categories (Islamic banks and conventional banks) while the lowest average mean score for both type of banks was the ‘Tangible’ dimension.

On the other hand, the ‘Assurance’ dimension scored the highest average mean in the perception part of Islamic banks. While for the perception part of conventional banks, ‘Reliability’ dimension scored the highest. In contrast, the lowest score of average mean for the perception of Islamic and conventional banks was the ‘Empathy’ dimension. Thus, the results suggested that there was no significant difference between the result of the banks as a whole and the different type of banks (Islamic banks vs. conventional banks) except for the perception part of the conventional banks where ‘Reliability’ dimension scored the highest.

**Table 6.35: Mean Analysis of Respondents’ Opinion on Statement Related to Service Quality for Islamic Bank**

Statements	N	Mean	Std. Deviation
Islamic banks must provide excellent service to fulfill the religious obligation in addition to satisfy their customers	487	4.51	1.956
Customer is willing to pay more for Shari’ah compliant products	487	4.33	.855
Valid N (listwise)	487		

As illustrated in Table 6.35, the mean for respondents’ opinion on statement related to service quality for Islamic bank is shown. The highest score of mean of 4.51 was given to the statement ‘Islamic banks must provide excellent service to fulfill the religious obligations in addition to satisfy their customers’. The second statement which stated that ‘customers is willing to pay more for *Shari’ah* compliant products’ had scored a moderate mean of 4.33.

Furthermore, both statements have a mean score above than 4.0 which could be considered a higher score of mean. This shows that most of the respondents (which are the customers of Islamic banks) agreed that by providing an excellent service quality to customers, the Islamic banks are at the same time, fulfilling their religious obligation.

On the other hand, the second statement with a mean score of 4.33 showed that they are willing to pay more for a *Shari'ah* compliant product because they believed that by choosing a *Shari'ah* compliant product, they were fulfilling part of the religious obligations. Thus, most of the respondents still uphold their religious belief in doing business with their banks.

**Table 6.36: Mean Analysis of Respondents' Opinion on Statement Related to Service Quality for Conventional and Islamic Bank**

Statements	N	Mean	Std. Deviation
Service quality increases efficiency and productivity	941	4.64	.550
Service quality will earn customer loyalty	941	4.59	.620
Service quality will enhance image and values of a bank	941	4.49	.648
Service quality fan positive word-of-mouth advertising	941	4.43	.722
I would recommend my bank to my friends and family members	941	4.30	.752
Service quality will shelter bank from price competition	941	4.28	.773
Customer is willing to pay more for a better service quality	941	3.98	1.057
Valid N (listwise)	941		

Table 6.36 presents the result of the mean analysis of the respondents' opinion on statement related to service quality for both conventional and Islamic banks. The highest mean score was for the statement 'service quality increases efficiency and productivity' with a mean of 4.64. This was followed by the statement 'service quality will earn customer loyalty' of which had a mean score of 4.59.

The next four statements had a moderate score of mean ranging from 4.28 to 4.49. These statements were; ‘service quality will enhance image and values of a bank’ (4.49); ‘service quality fan positive word-of-mouth advertising’ (4.43); ‘I would recommend my bank to my friends and family members’ (4.30) and; ‘service quality will shelter bank from price competition’ (4.28).

The lowest score of mean was for the statement ‘customer is willing to pay more for a better service quality’. The mean for that statement was below 4.0 and only scored a mean of 3.98. It should be noted that most of the customers demanded a higher service quality however; they were not willing to pay more for it. This showed that customers expected a better service quality from their bank without having to pay a higher price for their products and services. Thus, banks have to find a way to provide excellent service quality but at low cost for the customers. In a way, this will lead to customers’ retention and loyalty in the long run.

**Table 6.37: Respondents’ Satisfaction with the Service Quality of Overall Malaysian Banks**

Satisfied with Service Quality		Frequency	Percent	Cumulative Percent	Mean
Valid	Not satisfied at all	2	0.2	0.2	
	Not satisfied	62	6.6	6.8	
	I do not care	72	7.7	14.5	
	Satisfied	691	73.4	87.9	
	Very satisfied	114	12.1	100.0	
	<b>Total</b>	<b>941</b>	<b>100.0</b>		<b>3.91</b>

According to Table 6.37, the respondents showed their opinion on the service quality of overall Malaysian banks. The majority of the respondents with a percentage of 73.4 % were satisfied with the service quality of their bank. This was followed by 12.1% which were very satisfied with the service quality of their bank.

A total of 14.5% from the respondents were in the category of ‘I do not care’, ‘not satisfied’ and ‘not satisfied at all’. 7.7% of the respondents were in the category ‘I do not care’, followed by 6.6% in the category ‘not satisfied’ and 0.2% respondents were

‘not satisfied at all’. It should be noted that the combination of ‘satisfied’ and ‘very satisfied’ categories form a total of 85.5% of the total population of the survey. The results showed that majority of the respondents were satisfied with the service quality of their banks.

**Table 6.38: Respondents’ Satisfaction with the Service Quality of Islamic Banks**

Satisfied with Service Quality		Frequency	Percent	Cumulative Percent	Mean
Valid	Not satisfied at all	1	0.2	0.2	
	Not satisfied	42	8.6	8.8	
	I do not care	35	7.2	16.0	
	Satisfied	346	71.0	87.1	
	Very satisfied	63	12.9	100.0	
	<b>Total</b>	<b>487</b>	<b>100.0</b>		<b>3.88</b>

**Table 6.39: Respondents’ Satisfaction with the Service Quality of Conventional Banks**

Satisfied with Service Quality		Frequency	Percent	Cumulative Percent	Mean
Valid	Not satisfied at all	1	0.2	0.2	
	Not satisfied	20	4.4	4.6	
	I do not care	37	8.1	12.8	
	Satisfied	345	76.0	88.8	
	Very satisfied	51	11.2	100.0	
	<b>Total</b>	<b>454</b>	<b>100.0</b>		<b>3.94</b>

In furthering the analysis, this study also analysed the relationship between service quality and customers’ satisfaction of Islamic and conventional banks separately. Table 6.38 shows the result of the respondents’ satisfaction with the service quality of Islamic banks, while the result for the conventional banks is presented in Table 6.39.

For both bank types (Islamic and conventional banks), the majority of the respondents with a percentage of 71 % (Islamic banks) and 76% (conventional banks) were satisfied with the service quality of their bank. This was followed by 12.9% (Islamic

banks) and 11.2% (conventional banks) of the respondents that were very satisfied with the service quality of their bank.

Nevertheless, a total of 16% from the respondents of Islamic banks were in the category of ‘I do not care’, ‘not satisfied’ and ‘not satisfied at all’. This percentage was higher than the percentage of the respondents of conventional banks which was only 12.8% for the same category.

However, the combination of ‘satisfied’ and ‘very satisfied’ categories show a total of 83.9% (Islamic banks) and 87.2% (conventional banks) of the total population for each type of banks. Although the majority of the respondents were satisfied with the service quality of their banks, the results showed that the conventional banks have higher percentage in terms of customers’ satisfaction than the Islamic banks.

## 6.5 COMPARING THE RESPONDENTS’ RESPONSES TO THE MODIFIED SERVQUAL DIMENSIONS

This section presents the mean comparison for all items of the dimensions. Furthermore, it presents the mean of the service quality expectation and perception for the dimensions in relation to each sampled bank. This is expected to offer a comparative understanding related to service quality performance in Malaysian banking.

**Table 6.40: Comparing the Mean Value of Service Quality Expectation and Perception for the Sampled Banks (Tangible Dimension)**

Dimensions	Tangible							
Item	1.The bank has modern looking equipments		2.The bank has visually appealing interior design and facilities		3.The bank’s brochures and forms are clear and easy to understand		4.The bank’s employees are neat-appearing	
Bank	Exp. Mean	Perc. Mean	Exp. Mean	Perc. Mean	Exp. Mean	Perc. Mean	Exp. Mean	Perc. Mean
Affin Islamic	4.69	4.13	4.38	4.00	4.69	4.06	4.50	4.13
Al-Rajhi	4.82	4.05	3.86	3.55	4.41	3.82	4.27	3.86

Am Islamic	4.75	4.15	4.20	4.10	4.60	4.30	4.55	4.15
BIMB	4.65	4.21	3.90	3.83	4.55	4.04	4.36	4.06
BMMB	4.74	4.26	3.91	3.91	4.61	4.09	4.30	3.98
CIMB Islamic	4.76	4.31	4.07	3.81	4.54	4.07	4.37	4.16
EONCAP Islamic	4.40	3.80	3.40	3.40	4.40	3.40	4.60	3.80
Hong Leong Islamic	4.50	4.38	3.87	3.88	4.38	4.13	4.38	4.13
HSBC Amanah	4.71	3.86	3.71	3.57	4.86	3.57	4.57	3.57
Maybank Islamic	4.68	4.05	3.95	3.59	4.54	3.87	4.42	3.89
OCBC Al-Amin	4.40	4.00	4.00	3.80	4.00	3.80	3.80	3.60
Public Islamic	4.75	4.38	4.06	3.81	4.56	4.13	4.44	3.81
RHB Islamic	4.90	4.25	4.30	3.90	4.55	4.00	4.35	3.85
Standard Chartered Saadiq	4.75	4.00	4.25	4.00	4.25	4.00	4.25	3.50
Affin Bank	4.46	4.15	3.54	3.85	4.31	4.00	4.31	4.08
AmBank	4.79	4.71	3.96	3.89	4.57	4.14	4.25	4.07
Alliance Bank	5.00	4.50	4.50	3.50	5.00	2.50	5.00	3.50
Bangkok Bank	5.00	5.00	3.00	3.00	5.00	5.00	4.00	3.00
CIMB Bank	4.70	4.27	3.82	3.69	4.54	3.91	4.22	3.91
EON Bank	4.60	4.30	4.00	3.70	4.30	3.70	4.20	3.70
Hong Leong Bank	4.89	4.33	3.67	3.78	4.67	4.33	4.11	4.11
HSBC Malaysia	4.82	4.82	3.73	3.82	4.55	4.27	4.18	4.09
Citibank Berhad	4.78	4.44	3.56	3.78	4.33	4.00	4.00	4.00
Malayan Banking	4.81	4.53	3.94	3.75	4.58	4.10	4.39	4.14
OCBC Bank	4.60	4.40	4.00	4.00	4.80	4.00	4.40	4.00
Public Bank	4.68	4.39	3.61	3.73	4.52	3.98	4.26	4.03
United Overseas Bank (Malaysia)	5.00	4.89	3.44	3.78	4.56	4.44	4.22	4.00
Standard Chartered	5.00	4.00	4.60	3.60	5.00	3.40	4.80	4.20
The Bank of Nova Scotia	5.00	4.33	4.67	4.00	5.00	4.67	5.00	4.67
RHB Bank	4.78	4.17	3.78	3.33	4.61	3.50	4.22	3.83
Bank Simpanan	4.50	4.21	3.79	3.71	4.36	4.00	4.21	4.00
Total	4.72	4.29	3.90	3.76	4.55	4.00	4.33	4.01

Table 6.40 presents the mean value of service quality expectation and perception for the sampled banks for the tangible dimension. The results suggested that most of the expectation mean were higher than the perception mean except for some cases. There

were 4 items under the ‘Tangible’ dimension. For the first item (the bank has modern looking equipments), only Bangkok Bank and HSBC had the same score for their expectation mean and perception mean. In other words, the customers’ perceptions on their banks’ equipment had matched their expectations.

As for item no. 2 (the bank has visually appealing interior design and facilities), 11 out of 31 banks had either same score or higher score on their perception mean with their expectation mean. The banks were BMMB, EONCAP Islamic, Hong Leong Islamic, Affin Bank, Bangkok Bank, Hong Leong Bank, HSBC, Citibank, OCBC Bank, Public Bank, and United Overseas Bank. The results showed that the customers agreed that their bank interior design and facilities were as what they expected.

For item no. 3 (the bank’s brochures and forms are clear and easy to understand), only Bangkok Bank had the same score for its expectation mean and perception mean, while the rest of the banks had lower score for their perception mean as compared to their expectation mean. The next item under ‘Tangible’ dimension was ‘the bank’s employees are neat-appearing’. For this item, Hong Leong Bank and Citibank were the banks that had the same score for their expectation mean and their perception mean. It showed that the customers of these two banks believed that their banks’ employees were neat-appearing as much as they expected the employees will be. On the other hand, the rest of the banks had higher score on their expectation mean as compared to their perception mean.

**Table 6.41: Comparing the Mean Value of Service Quality Expectation and Perception for the Sampled Banks (Reliability Dimension)**

Dimensions	Reliability									
Item	5.Application are processed on-time		6.Advertised promises are consistent with its performance		7. The employees of the bank insist on error-free records.		8.Business transactions are accurate		9.Customers’ problems are promptly and sincerely solved	
Bank	Exp. Mean	Perc. Mean	Exp. Mean	Perc. Mean	Exp. Mean	Perc. Mean	Exp. Mean	Perc. Mean	Exp. Mean	Perc. Mean
Affin Islamic	4.75	4.13	4.75	4.13	4.44	3.94	4.69	4.13	4.69	4.19
Al-Rajhi	4.55	3.77	4.50	3.86	4.59	3.82	4.68	3.91	4.59	3.64



Am Islamic	4.65	4.20	4.55	4.40	4.65	4.20	4.65	4.30	4.65	4.20
BIMB	4.58	3.96	4.55	3.93	4.54	4.05	4.61	4.13	4.62	4.02
BMMB	4.63	3.91	4.63	3.91	4.59	4.11	4.78	4.28	4.72	3.96
CIMB Islamic	4.69	4.13	4.59	4.09	4.53	4.13	4.68	4.22	4.69	4.03
EONCAP Islamic	4.60	3.40	4.60	3.40	4.80	3.60	4.40	3.80	4.80	3.40
Hong Leong Islamic	4.50	4.13	4.50	4.25	4.63	4.25	4.63	4.13	4.63	4.25
HSBC Amanah	5.00	4.00	4.86	3.43	4.86	3.43	4.86	3.57	5.00	3.57
Maybank Islamic	4.60	3.95	4.53	3.86	4.57	3.92	4.56	4.13	4.63	3.95
OCBC Al-Amin	4.20	3.60	4.20	3.40	4.40	4.00	4.40	3.60	4.00	3.60
Public Islamic	4.88	4.19	4.75	3.75	4.63	4.00	4.63	4.00	4.75	3.69
RHB Islamic	4.65	4.00	4.65	3.90	4.60	4.20	4.80	4.15	4.75	3.95
Standard Chartered Saadiq	4.50	4.00	3.50	3.75	4.25	3.50	4.00	4.50	4.25	4.00
Affin Bank	4.46	4.00	4.46	4.08	4.69	4.23	4.54	4.23	4.69	3.85
AmBank	4.68	4.25	4.57	4.25	4.54	4.18	4.71	4.50	4.71	4.25
Alliance Bank	5.00	3.50	5.00	2.50	5.00	3.00	5.00	3.50	5.00	3.00
Bangkok Bank	4.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00
CIMB Bank	4.65	3.93	4.62	3.85	4.69	4.02	4.73	4.11	4.75	3.93
EON Bank	4.60	3.90	4.40	3.60	4.40	3.90	4.40	3.80	4.50	3.80
Hong Leong Bank	4.78	4.22	4.67	4.11	4.67	4.44	4.78	4.33	4.89	4.33
HSBC Malaysia	4.82	4.45	4.55	4.27	4.82	4.27	4.64	4.64	4.73	4.27
Citibank Berhad	4.44	4.22	4.33	4.22	4.44	4.56	4.44	4.56	4.56	4.22
Malayan Banking	4.70	4.10	4.62	4.04	4.75	4.09	4.70	4.33	4.75	4.03
OCBC Bank	4.80	4.00	4.80	3.80	5.00	4.20	4.80	3.80	4.80	4.00
Public Bank	4.60	4.13	4.55	4.00	4.66	4.03	4.65	4.19	4.66	4.10
United Overseas Bank (Malaysia)	4.44	4.22	4.11	4.11	4.67	3.89	4.44	4.44	4.67	4.33
Standard Chartered	5.00	3.60	5.00	3.40	5.00	4.00	5.00	4.20	5.00	3.40
The Bank of Nova Scotia	5.00	4.00	5.00	4.67	5.00	4.67	5.00	4.67	5.00	5.00
RHB Bank	4.78	3.78	4.50	3.56	4.67	3.61	4.72	4.00	4.83	3.78
Bank Simpanan	4.43	4.14	4.21	3.93	4.50	4.07	4.64	4.29	4.71	3.93
Total	4.64	4.02	4.57	3.95	4.62	4.04	4.66	4.18	4.69	3.99

There were 5 items in the ‘Reliability’ dimension (item no. 5, 6, 7, 8, and 9) as stated in Table 6.41. Under item no. 5 (application are processed on-time), only Bangkok Bank had higher score on their perception mean (5.00) as compared to their expectation mean (4.00). In this case, the customers believed that their application were processed on-time by Bangkok Bank’s employees. The rest of the banks had higher score on their expectation mean as compared to their perception mean.

As for item no. 6 (advertised promises are consistent with its performance), Standard Chartered Saadiq had higher score on their perception mean as compared to their expectation mean, while Bangkok Bank and United Overseas Bank had a same score on their expectation mean and perception mean. In other words, the customers considered that the banks’ advertised promises were consistent with its performance.

For item no.7 (the employees of the bank insist on error-free records), only Citibank had higher score on their perception mean as compared to their expectation mean. The results showed that customers agreed that Citibank’s employees insisted on error-free records. As for item no. 8 (business transaction are accurate), HSBC and United Overseas Bank had the same score for their perception and expectation mean. While for Standard Chartered Saadiq, Bangkok Bank and Citibank, they had higher score on their perception mean as compared to their expectation mean. In other words, customers of these banks regarded that the business transaction of their banks were accurate. For item no. 9 (customers’ problems are promptly and sincerely solved), only Bangkok Bank and The Bank of Nova Scotia had the same score for their expectation and perception mean. In this regards, the customers of these two banks considered that their problems were promptly solved by their banks’ employees. The rest of the banks had lower score on their perception mean as compared to their expectation mean.

**Table 6.42: Comparing the Mean Value of Service Quality Expectation and Perception for the Sampled Banks (Responsiveness Dimension)**

Dimensions	Responsiveness			
Item	10. The employees of the bank give customers	11. Customers are told when services will be performed	12. The employees of the bank are willing to help	13. The employees of the bank are never too busy

	prompt service				their customers		to respond to customers requests	
<b>Bank</b>	<b>Exp. Mean</b>	<b>Perc. Mean</b>	<b>Exp. Mean</b>	<b>Perc. Mean</b>	<b>Exp. Mean</b>	<b>Perc. Mean</b>	<b>Exp. Mean</b>	<b>Perc. Mean</b>
Affin Islamic	4.63	4.00	4.63	4.00	4.63	4.13	4.50	4.06
Al-Rajhi	4.64	3.59	4.41	3.45	4.36	3.68	4.41	3.64
Am Islamic	4.75	4.15	4.70	4.10	4.75	4.25	4.60	4.05
BIMB	4.60	3.86	4.54	3.89	4.58	4.01	4.55	3.91
BMMB	4.61	3.96	4.61	3.89	4.67	4.00	4.57	3.91
CIMB Islamic	4.65	4.10	4.49	3.94	4.63	4.15	4.54	4.03
EONCAP Islamic	5.00	3.40	4.40	3.20	4.40	3.80	4.40	3.80
Hong Leong Islamic	4.63	4.13	4.63	4.25	4.50	3.88	4.50	4.00
HSBC Amanah	5.00	3.57	4.71	3.14	5.00	3.71	5.00	3.43
Maybank Islamic	4.63	3.89	4.53	3.99	4.54	3.94	4.52	3.88
OCBC Al-Amin	4.00	3.60	4.00	3.20	4.40	3.60	4.00	4.00
Public Islamic	4.69	3.88	4.44	3.81	4.63	3.88	4.56	3.88
RHB Islamic	4.60	3.65	4.55	3.90	4.65	3.90	4.55	3.85
Standard Chartered Saadiq	3.75	3.25	3.50	3.00	4.00	3.25	3.75	3.25
Affin Bank	4.62	3.77	4.54	3.85	4.69	3.92	4.69	3.92
AmBank	4.54	4.18	4.50	3.93	4.57	4.07	4.57	4.07
Alliance Bank	5.00	3.50	5.00	3.00	5.00	3.50	5.00	3.50
Bangkok Bank	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
CIMB Bank	4.69	3.91	4.54	3.80	4.63	3.93	4.57	3.82
EON Bank	4.50	3.30	4.50	3.60	4.50	3.50	4.50	3.60
Hong Leong Bank	4.78	4.22	4.78	4.00	4.56	4.33	4.56	4.44
HSBC Malaysia	4.55	4.18	4.45	4.27	4.82	4.18	4.73	4.18
Citibank Berhad	4.56	4.22	4.33	4.33	4.44	4.22	4.33	4.33
Malayan Banking	4.82	3.94	4.69	3.89	4.73	3.97	4.69	3.91
OCBC Bank	5.00	4.40	5.00	4.40	4.80	4.20	4.80	4.00
Public Bank	4.68	3.95	4.48	3.89	4.58	3.95	4.56	3.89
United Overseas Bank (Malaysia)	4.89	3.78	4.22	4.00	4.56	3.89	4.67	3.67
Standard Chartered	5.00	3.60	5.00	3.80	5.00	3.40	5.00	3.60
The Bank of Nova Scotia	5.00	4.67	4.67	4.00	5.00	5.00	5.00	4.33
RHB Bank	4.67	3.56	4.33	3.44	4.61	3.56	4.50	3.39

Bank Simpanan	4.64	4.00	4.36	4.07	4.57	4.00	4.43	3.93
Total	4.67	3.91	4.54	3.87	4.62	3.97	4.57	3.89

There were 4 items in ‘Responsive’ dimension (item no. 10, 11, 12, and 13) as shown in Table 6.42. Under item no. 10 (the employees of the bank give customers prompt service), only Bangkok Bank had perception mean (4.00) that matched their expectation mean (4.00). This suggested that the customers of Bangkok Bank considered the employees of the bank gave prompt service to their customers. While for the rest of the banks, their expectation mean scored higher than their perception mean.

For item no. 11 (customers are told when services will be performed), only Bangkok Bank and Citibank had the same score for their perception and expectation mean. In other words, the customers of these banks totally agreed that they were told when the services will be performed. The rest of the banks had lower score on their perception mean as compared to their expectation mean. As for item no. 12 (the employees of the bank are willing to help their customers), only Bangkok Bank and The Bank of Nova Scotia had perception mean that matched their expectation mean.

While for item no. 13 (the employees of the bank are never too busy to respond to customers request), only OCBC Al-Amin, Bangkok bank and Citibank had the same score for their perception and expectation mean. The customers of these banks considered that the employees of these banks were never too busy to respond to their request. The rest of the banks had lower score on their perception mean as compared to their expectation mean for this item.

**Table 6.43: Comparing the Mean Value of Service Quality Expectation and Perception for the Sampled Banks (Assurance Dimension)**

Dimensions	Assurance							
Item	14. Customers of the bank feel safe in their transaction		15. The employees have the knowledge to answer customers’ questions		16. The employees of the bank are courteous with customers		17. The employees’ behavior instills confidence in customers	
Bank	Exp.	Perc.	Exp.	Perc.	Exp.	Perc.	Exp.	Perc.

	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Affin Islamic	4.63	4.06	4.69	4.06	4.56	4.06	4.63	4.06
Al-Rajhi	4.68	3.77	4.73	3.55	4.68	3.86	4.50	3.64
Am Islamic	4.70	4.30	4.40	4.30	4.55	4.20	4.75	4.30
BIMB	4.58	4.13	4.52	4.03	4.45	4.08	4.49	4.00
BMMB	4.61	4.17	4.57	4.02	4.50	4.09	4.48	3.91
CIMB Islamic	4.63	4.07	4.53	4.06	4.57	4.13	4.62	4.13
EONCAP Islamic	4.20	3.60	4.20	3.60	4.40	3.60	4.20	3.60
Hong Leong Islamic	4.50	4.38	4.50	4.25	4.38	4.37	4.50	4.25
HSBC Amanah	5.00	3.71	4.86	3.43	4.86	3.57	4.86	3.29
Maybank Islamic	4.60	4.09	4.56	4.10	4.52	4.09	4.45	3.97
OCBC Al-Amin	4.40	3.80	4.20	4.00	4.20	4.20	4.00	3.60
Public Islamic	4.63	3.88	4.63	3.88	4.56	4.00	4.63	3.88
RHB Islamic	4.70	4.20	4.60	3.85	4.65	3.90	4.65	4.05
Standard Chartered Saadiq	4.50	3.25	4.25	3.75	4.25	3.50	4.00	3.50
Affin Bank	4.77	4.15	4.69	4.00	4.69	4.15	4.69	3.77
AmBank	4.54	4.29	4.50	4.11	4.61	4.11	4.50	3.93
Alliance Bank	5.00	3.50	5.00	3.00	5.00	3.00	5.00	3.00
Bangkok Bank	5.00	4.00	4.00	4.00	4.00	3.00	5.00	4.00
CIMB Bank	4.64	4.09	4.58	3.92	4.51	3.91	4.53	3.95
EON Bank	4.30	3.60	4.40	3.60	4.40	3.70	4.20	3.30
Hong Leong Bank	4.67	4.44	4.78	4.33	4.56	4.44	4.56	4.33
HSBC Malaysia	4.91	4.36	4.82	4.36	4.45	4.45	4.64	4.09
Citibank Berhad	4.56	4.11	4.56	4.44	4.56	4.11	4.67	3.89
Malayan Banking	4.74	4.16	4.77	4.09	4.72	4.03	4.70	3.97
OCBC Bank	4.60	4.20	4.80	4.00	4.80	4.00	4.80	4.40
Public Bank	4.66	4.18	4.65	4.00	4.60	3.94	4.52	4.00
United Overseas Bank (Malaysia)	4.67	4.33	4.78	4.56	4.67	4.11	4.56	4.22
Standard Chartered	4.80	3.60	5.00	4.00	5.00	4.00	5.00	4.20
The Bank of Nova Scotia	4.33	5.00	4.33	4.33	4.00	4.67	4.00	5.00
RHB Bank	4.72	3.50	4.61	3.61	4.44	3.56	4.67	3.56
Bank Simpanan	4.36	4.07	4.57	4.21	4.57	4.00	4.29	4.29
Total	4.63	4.10	4.60	4.02	4.55	4.02	4.55	3.97

The ‘Assurance’ dimension had 4 items (item no. 14, 15, 16 and 17) as stated in Table 6.43. For item no. 14 (customers of the bank feel safe in their transaction), the perception mean of The Bank of Nova Scotia had exceeded their expectation mean. This suggested that their customers felt safe in their transaction. As for item no. 15 (the employees have the knowledge to answer customers’ questions), Bangkok Bank and The Bank of Nova Scotia had the same score for their perception and expectation mean. In other words, the customers of these banks agreed that the employees had the knowledge to answer their questions. The rest of the banks had lower score on their perception mean as compared to their expectation mean.

For item no. 16 (the employees of the bank are courteous with customers), OCBC Al-Amin and HSBC had perception mean that matched their expectation mean, while The Bank of Nova Scotia had higher score on their perception mean as compared to their expectation mean. The customers of these banks considered that the employees were courteous with their customers.

As for item no. 17 (the employees’ behaviour instills confidence in customers), only The bank of Nova Scotia had higher score on their perception mean as compared to their expectation mean. The finding suggested that the customers of this bank agreed that the employees’ behavior instilled confidence in their customers. The rest of the banks had lower score on their perception mean as compared to their expectation mean.

**Table 6.44: Comparing the Mean Value of Service Quality Expectation and Perception for the Sampled Banks (Empathy Dimension)**

Dimensions	Empathy									
Item	18. The bank has their customer’s best interest at heart		19. The bank has operating hours convenient to all its customers		20. The employees of the bank understand the specific needs of their customers		21. The bank gives their customers individual attention		22. The employees of the bank give customers personal attention	
Bank	Exp. Mean	Perc. Mean	Exp. Mean	Perc. Mean	Exp. Mean	Perc. Mean	Exp. Mean	Perc. Mean	Exp. Mean	Perc. Mean
Affin Islamic	4.63	4.13	4.56	4.13	4.56	3.94	4.44	3.88	4.38	3.94

Al-Rajhi	4.55	3.64	4.55	3.77	4.50	3.68	4.14	3.59	4.05	3.55
Am Islamic	4.60	4.10	4.50	4.15	4.40	4.20	4.40	4.10	4.50	4.00
BIMB	4.48	4.03	4.46	3.96	4.35	3.94	4.25	3.89	4.22	3.78
BMMB	4.63	4.09	4.52	3.96	4.43	3.96	4.30	3.76	4.28	3.63
CIMB Islamic	4.54	4.07	4.56	4.07	4.41	4.03	4.31	3.97	4.28	3.93
EONCAP Islamic	4.00	3.60	4.00	3.60	4.40	3.60	3.80	3.60	3.80	3.00
Hong Leong Islamic	4.38	4.00	4.38	4.13	4.13	3.88	4.25	4.00	4.13	3.88
HSBC Amanah	4.71	3.57	4.71	3.29	4.71	3.57	4.86	3.57	4.57	3.43
Maybank Islamic	4.41	3.96	4.41	4.00	4.33	3.93	4.20	3.84	4.20	3.76
OCBC Al-Amin	4.00	4.00	3.60	3.60	3.80	4.20	4.00	3.40	4.00	4.00
Public Islamic	4.56	4.00	4.50	3.94	4.62	3.87	4.37	3.56	4.25	3.44
RHB Islamic	4.70	3.85	4.65	3.65	4.35	3.80	4.10	3.65	4.10	3.55
Standard Chartered Saadiq	4.25	3.00	4.25	3.75	4.25	3.75	4.25	3.00	4.25	4.00
Affin Bank	4.54	3.85	4.77	3.69	4.31	4.00	4.54	4.08	4.31	3.77
AmBank	4.57	4.14	4.61	4.32	4.36	4.00	4.18	3.86	4.21	3.79
Alliance Bank	5.00	3.50	5.00	3.00	5.00	3.50	5.00	3.50	5.00	3.00
Bangkok Bank	4.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	3.00
CIMB Bank	4.51	3.87	4.46	3.80	4.42	3.79	4.18	3.66	4.17	3.64
EON Bank	4.30	3.60	4.30	3.70	4.40	3.50	4.20	3.30	4.50	3.50
Hong Leong Bank	4.89	4.44	4.67	4.11	4.78	4.22	4.22	3.89	4.11	3.67
HSBC Malaysia	4.73	4.09	4.36	4.00	4.27	4.18	4.36	4.00	4.36	3.82
Citibank Berhad	4.56	4.11	4.33	4.11	4.56	4.22	4.22	4.00	4.56	4.22
Malayan Banking	4.72	3.99	4.65	3.96	4.60	3.95	4.38	3.78	4.30	3.71
OCBC Bank	4.60	4.20	4.60	4.00	4.60	3.40	4.60	4.20	4.60	3.40
Public Bank	4.61	4.02	4.63	3.92	4.50	3.90	4.24	3.77	4.18	3.63
United Overseas Bank (Malaysia)	4.78	4.00	4.44	3.56	4.56	4.00	4.44	3.89	4.33	3.56
Standard Chartered	4.80	3.80	4.60	4.00	5.00	4.20	4.80	4.20	4.60	4.00
The Bank of Nova Scotia	4.00	4.33	4.33	4.33	4.00	4.67	4.00	4.00	4.00	5.00
RHB Bank	4.61	3.56	4.56	3.33	4.44	3.44	4.28	3.11	3.72	3.06
Bank Simpanan	4.57	4.21	4.57	4.14	4.29	3.93	4.07	3.71	4.00	3.57
Total	4.55	3.97	4.52	3.93	4.43	3.91	4.27	3.79	4.23	3.71

The ‘Empathy’ dimension had 5 items (item no.18, 19, 20, 21 and 22) as shown in Table 6.44. For item no. 18 (the bank has their customer’s best interest at heart), only OCBC Al-Amin and Bangkok Bank had the same score for their expectation and

perception mean. The customers of these banks believed that their banks had their customer's best interest at heart.

As for item no. 19 (the bank has operating hours convenient to all its customers), only OCBC Al-Amin, Bangkok Bank and The Bank of Nova Scotia had the same score for their expectation and perception mean. In this regards, the customers of these banks agreed that these banks had operating hours convenient to their customers. The rest of the banks had lower score on their perception mean as compared to their expectation mean.

Under item no. 20 (the employees of the bank understand the specific needs of their customers), only OCBC Al-Amin had higher perception mean as compared to their expectation mean. In other words, the customers considered the employees of the bank understood their customers' specific needs. As for item no. 21 (the bank gives their customers individual attention), only Bangkok Bank and The bank of Nova Scotia had the same score for their expectation and perception mean.

As for item no. 22 (the employees of the bank give customers personal attention), only The Bank of Nova Scotia had higher score on their perception mean as compared to their expectation mean, while OCBC Al-Amin had the same score for their perception and expectation mean. The result suggested that the customers agreed that these banks gave personal attention to their customers. The rest of the banks had lower score on their perception mean as compared to their expectation mean.

**Table 6.45: Comparing the Mean Value of Service Quality Expectation and Perception for the Sampled Banks (Islamic Values Dimension)**

Dimensions	Islamic Values							
Item	23. The Islamic bank provides banking services according to Islamic <i>Shari'ah</i>		24. The employees have knowledge on Islamic banking products and services		25. The Islamic bank neither pays nor takes interest on savings and loan accounts		26. The Islamic bank provides profit-sharing investment account	
Bank	Exp. Mean	Perc. Mean	Exp. Mean	Perc. Mean	Exp. Mean	Perc. Mean	Exp. Mean	Perc. Mean
Affin Islamic	4.56	4.00	4.56	4.06	4.50	3.75	4.56	4.00



Al-Rajhi	4.59	3.86	4.64	3.86	4.55	3.82	4.64	3.82
Am Islamic	4.65	4.30	4.70	4.25	4.55	4.20	4.70	4.15
BIMB	4.55	4.04	4.56	4.02	4.62	3.99	4.45	4.00
BMMB	4.63	4.17	4.63	4.09	4.65	4.02	4.61	3.98
CIMB Islamic	4.65	4.19	4.66	4.16	4.62	4.22	4.50	4.16
EONCAP Islamic	4.80	3.40	4.40	3.40	4.40	3.80	4.40	4.00
Hong Leong Islamic	4.50	4.25	4.63	4.38	4.62	4.25	4.50	4.13
HSBC Amanah	5.00	3.43	4.86	3.29	4.57	3.43	4.43	3.43
Maybank Islamic	4.55	4.10	4.52	4.13	4.55	4.09	4.45	4.00
OCBC Al-Amin	4.60	4.40	4.20	4.00	3.80	3.80	4.00	3.60
Public Islamic	4.50	3.81	4.50	3.81	4.69	3.88	4.44	3.94
RHB Islamic	4.60	3.90	4.80	3.75	4.50	3.95	4.30	4.05
Standard Chartered Saadiq	4.50	4.00	4.25	4.00	4.25	3.25	4.50	2.50
Total	4.59	4.06	4.59	4.04	4.58	4.01	4.48	4.00

Dimensions	Islamic Values			
Item	27. The prices of the Islamic bank' products and services are competitive		28. The Islamic bank have well known and trustworthy <i>Shari'ah</i> Advisory Board	
Bank	Exp. Mean	Perc. Mean	Exp. Mean	Perc. Mean
Affin Islamic	4.56	4.13	4.63	4.13
Al-Rajhi	4.50	3.77	4.41	3.91
Am Islamic	4.70	4.15	4.60	4.15
BIMB	4.44	3.91	4.53	3.94
BMMB	4.48	3.96	4.52	3.98
CIMB Islamic	4.57	4.15	4.60	4.13
EONCAP Islamic	4.40	3.20	4.40	3.20
Hong Leong Islamic	4.50	4.13	4.50	4.13
HSBC Amanah	4.71	2.86	4.71	3.29
Maybank Islamic	4.44	4.00	4.51	4.05
OCBC Al-Amin	4.00	3.20	4.20	4.40
Public Islamic	4.50	3.87	4.50	3.94
RHB Islamic	4.60	3.90	4.75	3.75
Standard Chartered Saadiq	4.25	3.25	4.50	3.75
Total	4.48	3.94	4.54	3.98

The 'Islamic values' dimension had 6 items (items no. 23, 24, 25, 26, 27 and 28) as stated in Table 6.45. As for item no. 25 (the Islamic bank neither pays nor takes

interest on savings and loan accounts), only OCBC Al-Amin had the same score for their expectation (3.80) and perception mean (3.80). However, it should be noted that the expectation mean score of 3.80 was the lowest mean score for the expectation part. The result suggest that the customers were not convinced enough that the bank neither pays nor takes interest on savings and loan accounts due to the lower score on the expectation mean.

**Table 6.46: Comparing the Mean Value of Service Quality Expectation and Perception for the Sampled Banks**

Dimensions	Social Responsibility	
Item	29. The bank is socially responsible	
Bank	Exp. Mean	Perc. Mean
Affin Islamic	4.56	4.00
Al-Rajhi	4.55	3.73
Am Islamic	4.70	4.10
BIMB	4.50	3.99
BMMB	4.46	3.98
CIMB Islamic	4.57	4.13
EONCAP Islamic	4.40	3.60
Hong Leong Islamic	4.50	4.00
HSBC Amanah	4.57	3.43
Maybank Islamic	4.36	4.01
OCBC Al-Amin	3.60	3.60
Public Islamic	4.44	3.87
RHB Islamic	4.70	3.85
Standard Chartered Saadiq	4.25	3.00
Affin Bank	4.77	4.00
AmBank	4.29	4.18
Alliance Bank	5.00	3.50
Bangkok Bank	4.00	4.00
CIMB Bank	4.26	3.81
EON Bank	4.20	3.50
Hong Leong Bank	4.22	4.00
HSBC Malaysia	4.27	4.09
Citibank Berhad	4.33	4.00
Malayan Banking	4.47	3.92
OCBC Bank	4.60	4.00
Public Bank	4.50	3.98

United Overseas Bank (Malaysia)	4.33	3.89
Standard Chartered	4.80	3.80
The Bank of Nova Scotia	4.33	4.67
RHB Bank	4.39	3.61
Bank Simpanan	4.36	3.93
Total	4.44	3.94

As stated in Table 6.46, the ‘Social responsibility’ dimension had 1 item only. OCBC Al-Amin had the lowest score on expectation mean (3.60). Although the bank had the same score for their expectation and perception mean, the modest score of 3.60 suggested that their customers considered the performance of the bank on their social responsibility was still low as compared to other banks.

## 6.6 SUMMARY

The aim of this chapter was to measure the customers’ expectations and perceptions towards service quality of conventional and Islamic banks in Malaysia. Beside of that, the study also tries to gauge the level of awareness and knowledge of the respondents regarding the products and services offered by Islamic and conventional banks and the patronage factors influencing the customers to open a banking account.

From 20 types of products and services offered by Islamic banks, *wadiah*, *rahnu* and *mudharabah* were ranked the highest three product which had percentage of 60% and above. On the other hand, the products and services offered by conventional bank that were ranked the highest 3 from 22 products and services, were saving account, credit card services and vehicle financing.

The research was further extended in order to determine the major factors that influenced the customers to open an Islamic banking account. Based on the ranking, it turns out that religiosity factors ranked first according to the highest mean value.

Consequently, this chapter further suggested that, besides being religious and having knowledge in the Islamic banking products and services, the respondents also perceived that good services and better facilities available were also important factors

for patronage of an Islamic bank. Despite that, support from the government, continuous trainings and lessons on Islamic banking and finance, and public awareness programmes are still the core factors that will govern the sustainability of the Islamic banking system in the future.

The findings on the expectations and perceptions of customers on service quality of bank revealed that the highest ranking for the expectation part was 'Reliability' dimension followed by 'Responsive', 'Assurance', 'Islamic Values', 'Social Responsibility', 'Empathy', and 'Tangible'. On the other hand, the highest ranking for the perception part was also 'Reliability' dimension followed by 'Assurance', 'Tangible', 'Islamic Values', 'Social Responsibility', 'Responsive' and 'Empathy'.

Nevertheless, this chapter further concludes that most of the respondents were satisfied with the service quality of their current bank with a mean of 3.91. Only 14.5% of the respondents were under the category of either 'I do not care/ Not satisfied/ Not satisfied at all'. The majority of the respondents which was 85.5% were under the category of either 'Satisfied' or 'Very satisfied'. There are also some interesting findings with regard to the expectation and perception mean comparison, in which the majority of the sampled banks had lower scores on the perception mean as compared to their expectation mean except for some cases. Lastly, the banks should play a more proactive role to enhance their service quality and to close the gaps between the expectation and perception of their customers.

## **Chapter 7**

### **Exploring the Customers' Expectations and Perceptions of Bank's Service Quality: An Inferential Statistical Analysis**

#### **7.1 INTRODUCTION**

This chapter is an extension of Chapter 6, provides empirical findings resulting from respondents' opinions, perceptions, and attitudes towards service quality offered by the Malaysian banks. The findings will be used to provide a comparative analysis between several identified groups (*i.e.* gender, age, income level, level of education, Islamic banking type, local or foreign-owned and relationship duration). Furthermore, the chapter considers some determinants and factors, which contribute to the awareness and knowledge of the respondents concerning the products and services of the Islamic and conventional banks.

The inferential analysis in this chapter employs several inferential statistics tools for non-parametric data analysis, ranging from Mann-Whitney U Test, Kruskal-Wallis test to factor analysis. The chapter is divided into three broad sections: Section 7.2: Knowledge and awareness on banking products and services; Section 7.3: Identifying banking selection criteria; and 7.4: Customers' expectations and perceptions of the service quality of the Malaysian banks.

Section 7.2 of the chapter is further categorised into several strands, namely 'knowledge and awareness of products and services of Islamic banks', and 'knowledge and awareness of products and services of conventional banks'. In section 7.3, the main focus is on the analysis of various patronage factors that influenced the respondents to open an account with the Islamic or conventional banks and determine whether there are any cohesive reasons for selecting their existing bank competitors. Section 7.4, aims to identify whether there are any significant differences between the expectation based service quality with the perception based service quality. In addition, factor analysis is used to generate new dimensions for expectation and perception of service quality for Islamic and conventional banks in Malaysia. This chapter concludes with a brief summary of the overall analysis and findings.

## 7.2 KNOWLEDGE AND AWARENESS OF BANKING PRODUCTS AND SERVICES

It is assumed that the respondents as customers of Islamic and conventional banks have some level of knowledge and awareness concerning their products and services. A strong understanding and knowledge about banking products and services are expected to create more business opportunities for these banks. It is also important for the customers to have certain level of knowledge and awareness of products and services offered by their banks. Mainly because; they need to know whether the product or service is suitable for them, and is it worth their money. Therefore, this section, assesses the respondents' level of knowledge and awareness according to the selected category of the respondents' profile.

### 7.2.1 Knowledge and Awareness of Products and Services of Islamic Banks

The first category is the respondents' knowledge and awareness of the products and services offered by Islamic banks. As described in Chapter 6, from the total of 20 products and services, only 3 products or services were known by more than 60% of the respondents. The knowledge and awareness on the remaining 17 products and services had less than 41%.

This section investigates further to identify which subgroups of respondents had a higher level of awareness of the products and services. Mann-Whitney U test was utilised to examine 'gender', 'type of ownership' and 'Islamic bank type'. While, Kruskal-Wallis test was employed for 'age', 'education', 'duration of relationship', and 'income level'. A summary of the findings for these variables is provided from Table 7.1 to Table 7.7.

**Table 7.1: Mann-Whitney U Test (Gender)**

	Gender	N	Mean Rank	Asymp.Sig.
<i>Bai' al-dayn</i>	Male	206	229.36	0.000
	Female	281	254.73	
<i>Bai' al-inah</i>	Male	206	226.03	0.001
	Female	281	257.17	

<i>Bai' bithamanajil</i>	Male	206	227.53	0.007
	Female	281	256.08	
<i>Bai' al-salam</i>	Male	206	224.99	0.000
	Female	281	257.94	
<i>Tawarruq</i>	Male	206	236.13	0.028
	Female	281	249.77	
<i>Istisna'</i>	Male	206	240.36	0.304
	Female	281	246.67	
<i>Musharakah</i>	Male	206	233.99	0.084
	Female	281	251.34	
<i>Wadiah</i>	Male	206	241.83	0.720
	Female	281	245.59	
<i>Rahnu</i>	Male	206	231.01	0.037
	Female	281	253.52	
<i>Sarf</i>	Male	206	236.91	0.014
	Female	281	249.20	
<i>Hiwalah</i>	Male	206	237.63	0.085
	Female	281	248.67	
<i>Ijarah</i>	Male	206	232.53	0.042
	Female	281	252.41	
<i>Ijarah thumma al-bai'</i>	Male	206	228.45	0.000
	Female	281	255.40	
<i>Kafalah</i>	Male	206	230.99	0.001
	Female	281	253.54	
<i>Qard</i>	Male	206	225.99	0.000
	Female	281	257.20	
<i>Murabahah</i>	Male	206	233.75	0.106
	Female	281	251.51	
<i>Mudharabah</i>	Male	206	237.33	0.291
	Female	281	248.89	
<i>Ujr</i>	Male	206	233.77	0.004
	Female	281	251.50	
<i>Wakalah</i>	Male	206	227.31	0.001
	Female	281	256.24	
<i>Sukuk</i>	Male	206	225.85	0.000
	Female	281	257.30	

## Gender

The first subgroup is the 'gender' category. It should be noted that the respondents were coded as '1' if they were familiar with the products and services offered by their Islamic bank, and were coded as '2' if they were not familiar with the services and products. Therefore, the lower the mean rank suggested the higher level of familiarity with the products/ services. The result from the Mann-Whitney U test in Table 7.1 indicated that there was statistically significant difference between male and female in terms of their awareness level concerning the *bai' al-dayn* (0.000), *bai' al-inah* (0.001), *bai' bithaman ajil* (0.007), *bai' al-salam* (0.000), *tawarruq* (0.028), *musharakah* (0.084), *rahnu* (0.037), *sarf* (0.014), *hiwalah* (0.085), *ijarah* (0.042), *ijarah thumma al-bai'* (0.000), *ujr* (0.004), *wakalah* (0.001), and *sukuk* (0.000). This can be seen in their asymptotic significance values, as stated in the brackets, were significantly lower than the significance level of 10% confidence level. It should be

noted that with 5% significance level, the number of products for which there was a significant difference between the genders was lesser.

From 14 products and services that showed a significant difference between male and female in terms of their knowledge, 4 of them, namely *bai' al-dayn*, *bai' al-salam*, *ijarah thumma al-bai'* and *sukuk* achieved full significance level of 0.000. In the case of *bai' al-dayn*, the mean rank for male was 229.36, which was lower than the mean rank for female, which was 254.73. In the case of *bai' al-salam*, the mean rank for male (224.99) was also lower than the mean rank for female (257.94). As for *ijarah thumma al-bai'*, the mean rank for male (228.45) was again lower than the mean rank for female, which is 255.40. Furthermore, the male's mean rank of 225.85 for *sukuk* was also lower than the female's mean rank of 257.30. All of the four products and services showed that the male respondents had lower mean rank than the female, which implied that male had better level of knowledge and awareness of the listed financial products than the female.

**Table 7.2: Mann-Whitney U Test (Type of Islamic bank)**

	Type of Islamic Bank	N	Mean Rank	Asymp. Sig.
<i>Bai' al-dayn</i>	Stand-Alone Islamic bank	238	240.42	0.269
	Islamic Subsidiaries bank	249	247.42	
<i>Bai' al-inah</i>	Stand-Alone Islamic bank	238	248.32	0.365
	Islamic Subsidiaries bank	249	239.87	
<i>Bai' bithaman ajil</i>	Stand-Alone Islamic bank	238	237.97	0.261
	Islamic Subsidiaries bank	249	249.77	
<i>Bai' al-salam</i>	Stand-Alone Islamic bank	238	244.26	0.946
	Islamic Subsidiaries bank	249	243.75	
<i>Tawarruq</i>	Stand-Alone Islamic bank	238	246.08	0.506
	Islamic Subsidiaries bank	249	242.01	
<i>Istisna'</i>	Stand-Alone Islamic bank	238	245.58	0.610
	Islamic Subsidiaries bank	249	242.49	
<i>Musharakah</i>	Stand-Alone Islamic bank	238	242.43	0.757
	Islamic Subsidiaries bank	249	245.50	
<i>Wadiah</i>	Stand-Alone Islamic bank	238	236.62	0.163
	Islamic Subsidiaries bank	249	251.06	
<i>Rahnu</i>	Stand-Alone Islamic bank	238	240.99	0.582
	Islamic Subsidiaries bank	249	246.88	
<i>Sarf</i>	Stand-Alone Islamic bank	238	246.77	0.276
	Islamic Subsidiaries bank	249	241.35	
<i>Hiwalah</i>	Stand-Alone Islamic bank	238	245.54	0.635
	Islamic Subsidiaries bank	249	242.53	
<i>Ijarah</i>	Stand-Alone Islamic bank	238	246.64	0.594
	Islamic Subsidiaries bank	249	241.48	
<i>Ijarah thumma al-bai'</i>	Stand-Alone Islamic bank	238	246.45	0.491



	Islamic Subsidiaries bank	249	241.66	
<i>Kafalah</i>	Stand-Alone Islamic bank	238	243.40	0.863
	Islamic Subsidiaries bank	249	244.57	
<i>Qard</i>	Stand-Alone Islamic bank	238	246.28	0.560
	Islamic Subsidiaries bank	249	241.82	
<i>Murabahah</i>	Stand-Alone Islamic bank	238	236.10	0.154
	Islamic Subsidiaries bank	249	251.55	
<i>Mudharabah</i>	Stand-Alone Islamic bank	238	234.46	0.084
	Islamic Subsidiaries bank	249	253.11	
<i>Ujr</i>	Stand-Alone Islamic bank	238	245.06	0.735
	Islamic Subsidiaries bank	249	242.99	
<i>Wakalah</i>	Stand-Alone Islamic bank	238	247.46	0.447
	Islamic Subsidiaries bank	249	240.69	
<i>Sukuk</i>	Stand-Alone Islamic bank	238	242.76	0.744
	Islamic Subsidiaries bank	249	245.18	

### ***Islamic Bank Type***

The second control variable through which the knowledge and awareness is tested is ‘Islamic bank type’. Again for this group, the Mann-Whitney U test was used to identify if there was any statistically significant difference in the knowledge and awareness level on products and services offered by Islamic banks between the respondents of ‘stand-alone Islamic bank’ and ‘Islamic subsidiaries bank’.

The result shown in Table 7.2 indicates that the respondents from the ‘Islamic subsidiaries bank’ did not seem to differ in their knowledge and awareness level with the respondents from ‘stand-alone Islamic bank’ for all of the products and services, except for *mudharabah*. This could be seen from the p-value of 0.084, which was significantly lower than the critical p-value of 0.10. The ‘stand-alone Islamic bank’ mean rank at 234.46 for *mudharabah* was lower than the ‘Islamic subsidiaries bank’ mean rank of 253.11. Thus, the respondents of ‘stand-alone Islamic bank’ were more familiar with the products and services than the respondents of ‘Islamic subsidiaries bank’. In other products and services, the type of bank being full-fledged or Islamic subsidiary, do not produce any significant difference in relation to knowledge and awareness of the concerned products.

The analysis of the following five control variables were intended to ascertain whether there were any significant differences in terms of knowledge and awareness level according to ‘type of ownership’ and the respondents’ demographic profile such as: ‘age’, ‘education level’, ‘income level’ and ‘duration of the banking relationship’. It is expected that respondents of locally-owned Islamic banks had better awareness

than foreign-owned Islamic banks, while those who were in the aged of 30 to above 50 years old groups were expected to have a better awareness mainly due to better exposure; as for those who had a better education level were assumed to have better awareness; and those who had more income level were also expected to have better awareness. Lastly, those who had been in longer banking relationships were assumed to be more aware than those who were still new to the Islamic banks.

The results in Table 7.3 to 7.7 show that statistically, there were significant differences among various groups in the type of ownership, age, income level, education level and relationship duration categories. This can be seen from the following summary of the results:-

**Table 7.3: Mann-Whitney U Test (Type of Ownership)**

	Type of Ownership	N	Mean Rank	Asymp. Sig.
<i>Bai' al-dayn</i>	Locally-owned	449	245.39	0.131
	Foreign-owned	38	227.55	
<i>Bai' al-inah</i>	Locally-owned	449	245.73	0.203
	Foreign-owned	38	223.61	
<i>Bai' bithaman ajil</i>	Locally-owned	449	245.03	0.502
	Foreign-owned	38	231.88	
<i>Bai' al-salam</i>	Locally-owned	449	245.00	0.362
	Foreign-owned	38	232.14	
<i>Tawarruq</i>	Locally-owned	449	244.43	0.626
	Foreign-owned	38	238.87	
<i>Istisna'</i>	Locally-owned	449	245.56	0.077
	Foreign-owned	38	225.55	
<i>Musharakah</i>	Locally-owned	449	245.84	0.202
	Foreign-owned	38	222.29	
<i>Wadiah</i>	Locally-owned	449	244.18	0.906
	Foreign-owned	38	241.89	
<i>Rahnu</i>	Locally-owned	449	247.91	0.012
	Foreign-owned	38	197.86	
<i>Sarf</i>	Locally-owned	449	245.07	0.139
	Foreign-owned	38	231.37	
<i>Hiwalah</i>	Locally-owned	449	244.31	0.739
	Foreign-owned	38	240.37	
<i>Ijarah</i>	Locally-owned	449	245.18	0.403
	Foreign-owned	38	230.11	
<i>Ijarah thumma al-bai'</i>	Locally-owned	449	244.43	0.672
	Foreign-owned	38	238.96	
<i>Kafalah</i>	Locally-owned	449	245.60	0.108
	Foreign-owned	38	225.14	
<i>Qard</i>	Locally-owned	449	246.55	0.022
	Foreign-owned	38	213.92	
<i>Murabahah</i>	Locally-owned	449	245.43	0.366
	Foreign-owned	38	227.16	
<i>Mudharabah</i>	Locally-owned	449	246.74	0.081
	Foreign-owned	38	211.58	
<i>Ujr</i>	Locally-owned	449	244.98	0.274
	Foreign-owned	38	232.46	

<i>Wakalah</i>	Locally-owned	449	245.78	0.170
	Foreign-owned	38	223.01	
<i>Sukuk</i>	Locally-owned	449	245.67	0.121
	Foreign-owned	38	224.24	

### ***Type of Ownership***

The Mann-Whitney U test result in Table 7.3 suggests that there was significant difference in knowledge and awareness level for some of the products and services between locally-owned Islamic banks and foreign-owned Islamic banks. This could be evidenced from the p-value of 0.077 for *istisna'*, 0.012 for *rahnu*, 0.022 for *qard* and 0.081 for *mudharabah*. All of the p-value for these products and services were less than the critical p-value of 0.10.

The result from the test also showed that the products and services such as *istisna'*, *rahnu*, *qard* and *mudharabah* from the customers of foreign-owned Islamic banks category had lower mean rank and hence, the respondents had better knowledge of the products as compared to the customers of locally-owned Islamic banks. The mean rank for *istisna'* for foreign-owned Islamic banks was 225.55 while the locally-owned Islamic banks was at 245.56. Likewise, the mean score for *rahnu* was 197.89 for foreign-owned Islamic banks, and 247.91 for the locally-owned Islamic banks.

In addition, *qard* had lower mean rank of 213.92 for foreign-owned Islamic banks and 246.55 for locally-owned Islamic banks. Similarly, the mean score for foreign-owned Islamic banks for *mudharabah* was 211.58; which was lower than the locally-owned Islamic banks at 246.74. This result showed that customers of foreign-owned Islamic banks category had more knowledge and awareness of the products and services than the customers of locally-owned Islamic banks.

Initially, it was assumed that respondents from locally-owned Islamic banks should have better knowledge and awareness compared to those from foreign-owned Islamic banks. This is because the locally-owned Islamic banks have had remained much longer than foreign-owned Islamic banks in the Malaysian banking industry. However, the results revealed otherwise, which might suggest the efforts done by the foreign-owned Islamic banks in order to market their products and services to Malaysian customers were more successful than the locally-owned Islamic banks.

**Table 7.4: Kruskal-Wallis Test (Age Group)**

	Age	N	Mean Rank	Asymp. Sig.
<i>Bai' al-dayn</i>	Below 20	10	241.65	0.006
	21-30	274	253.56	
	31-40	138	227.18	
	41-50	45	233.53	
	Above 50	20	253.83	
<i>Bai' al-inah</i>	Below 20	10	251.80	0.000
	21-30	274	269.40	
	31-40	138	194.63	
	41-50	45	230.16	
	Above 50	20	263.98	
<i>Bai' bithaman ajil</i>	Below 20	10	279.30	0.000
	21-30	274	273.79	
	31-40	138	186.84	
	41-50	45	225.19	
	Above 50	20	254.95	
<i>Bai' al-salam</i>	Below 20	10	252.65	0.202
	21-30	274	249.45	
	31-40	138	231.12	
	41-50	45	239.12	
	Above 50	20	264.83	
<i>Tawarruq</i>	Below 20	10	240.15	0.236
	21-30	274	248.50	
	31-40	138	232.74	
	41-50	45	248.27	
	Above 50	20	252.33	
<i>Istisna'</i>	Below 20	10	264.00	0.316
	21-30	274	248.00	
	31-40	138	235.77	
	41-50	45	236.94	
	Above 50	20	251.83	
<i>Musharakah</i>	Below 20	10	287.65	0.302
	21-30	274	242.68	
	31-40	138	237.89	
	41-50	45	268.71	
	Above 50	20	226.78	
<i>Wadiah</i>	Below 20	10	286.75	0.156
	21-30	274	249.43	
	31-40	138	226.76	
	41-50	45	240.76	
	Above 50	20	274.58	
<i>Rahnu</i>	Below 20	10	274.75	0.045
	21-30	274	256.09	
	31-40	138	220.05	
	41-50	45	244.99	
	Above 50	20	226.05	
<i>Sarf</i>	Below 20	10	257.00	0.079
	21-30	274	248.11	
	31-40	138	234.06	
	41-50	45	251.59	
	Above 50	20	232.65	
<i>Hiwalah</i>	Below 20	10	266.00	0.317
	21-30	274	246.45	
	31-40	138	234.24	

	41-50	45	249.77	
	Above 50	20	253.83	
<i>Ijarah</i>	Below 20	10	233.95	0.103
	21-30	274	254.57	
	31-40	138	227.60	
	41-50	45	225.83	
	Above 50	20	258.30	
<i>Ijarah thumma al-bai'</i>	Below 20	10	246.65	0.000
	21-30	274	259.45	
	31-40	138	211.01	
	41-50	45	243.94	
	Above 50	20	258.83	
<i>Kafalah</i>	Below 20	10	245.65	0.000
	21-30	274	254.89	
	31-40	138	218.83	
	41-50	45	253.77	
	Above 50	20	245.65	
<i>Qard</i>	Below 20	10	253.65	0.000
	21-30	274	259.34	
	31-40	138	212.71	
	41-50	45	234.71	
	Above 50	20	265.83	
<i>Murabahah</i>	Below 20	10	245.10	0.963
	21-30	274	245.63	
	31-40	138	238.39	
	41-50	45	245.10	
	Above 50	20	257.27	
<i>Mudharabah</i>	Below 20	10	244.90	0.048
	21-30	274	257.70	
	31-40	138	219.84	
	41-50	45	234.08	
	Above 50	20	244.90	
<i>Ujr</i>	Below 20	10	264.50	0.492
	21-30	274	246.73	
	31-40	138	236.27	
	41-50	45	248.27	
	Above 50	20	240.15	
<i>Wakalah</i>	Below 20	10	293.50	0.108
	21-30	274	249.95	
	31-40	138	228.21	
	41-50	45	250.21	
	Above 50	20	232.63	
<i>Sukuk</i>	Below 20	10	275.50	0.001
	21-30	274	255.95	
	31-40	138	222.57	
	41-50	45	237.62	
	Above 50	20	226.80	

### **Age Group**

The Kruskal-Wallis test results in Table 7.4 suggests that there was a significant difference in knowledge and awareness level across five different age groups for *bai' al-dayn*, *bai' al-inah*, *bai' bithaman ajil*, *rahnu*, *sarf*, *ijarah thumma al-bai'*, *kafalah*, *qard*, *mudharabah* and *sukuk*. This could be seen from the p-value of 0.006 for *bai' al-dayn*; 0.000 for *bai' al-inah*; 0.000 for *bai' bithaman ajil*; 0.045 for *rahnu*; 0.079

for *sarf*; 0.000 for *ijarah thumma al-bai'*; 0.000 for *kafalah*; 0.000 for *qard*; 0.048 for *mudharabah* and 0.001 for *sukuk*. All of the p-values were lower than the critical p-value of 0.10.

In addition, from the above ten products and services that were significant for this age groups, the result from Table 7.4 shows that those who aged between 31 to 40 had better knowledge and awareness level compared to other categories of age (due to the lowest score of mean for aged 31 to 40 category) on all ten products except for *sarf*. The lowest mean score for *sarf* was from those who aged above 50 (mean: 232.65) followed by 41 to 50 age category (mean: 251.59) and the highest mean for *sarf* was those who aged below 20 (mean: 257.00). Thus, based on the mean value score, respondents who were above 50, had better level of knowledge and awareness of *sarf*.

As expected earlier, respondents who were between 31 to 40 years had a better knowledge and awareness as they obtained the highest mean scores on most of the products and services. This is because the more matured they become as they grew older, the longer relationship they would have with the Islamic banks and the better exposure with the products and services of the Islamic banks.

**Table 7.5: Kruskal-Wallis Test (Income Level)**

	Monthly Income	N	Mean Rank	Asymp. Sig.
<i>Bai' al-dayn</i>	RM 1,000 and below	70	238.69	0.009
	RM 1,001-RM 3,000	309	243.66	
	RM 3,001-RM 5,000	69	214.35	
	RM 5,001-RM 10,000	21	213.86	
	RM 10,001-RM 20,000	4	259.00	
	RM 20,001 and above	1	259.00	
<i>Bai' al-inah</i>	RM 1,000 and below	70	269.80	0.000
	RM 1,001-RM 3,000	309	245.95	
	RM 3,001-RM 5,000	69	176.72	
	RM 5,001-RM 10,000	21	203.21	
	RM 10,001-RM 20,000	4	234.25	
	RM 20,001 and above	1	293.50	
<i>Bai' bithaman ajil</i>	RM 1,000 and below	70	259.06	0.000
	RM 1,001-RM 3,000	309	253.27	
	RM 3,001-RM 5,000	69	158.57	
	RM 5,001-RM 10,000	21	195.86	
	RM 10,001-RM 20,000	4	201.50	
	RM 20,001 and above	1	320.00	
<i>Bai' al-salam</i>	RM 1,000 and below	70	228.37	0.012
	RM 1,001-RM 3,000	309	245.99	
	RM 3,001-RM 5,000	69	214.04	
	RM 5,001-RM 10,000	21	212.57	

	RM 10,001-RM 20,000	4	269.00	
	RM 20,001 and above	1	269.00	
<i>Tawarruq</i>	RM 1,000 and below	70	229.91	0.175
	RM 1,001-RM 3,000	309	242.43	
	RM 3,001-RM 5,000	69	226.09	
	RM 5,001-RM 10,000	21	234.43	
	RM 10,001-RM 20,000	4	197.75	
	RM 20,001 and above	1	257.00	
<i>Istisna'</i>	RM 1,000 and below	70	236.19	0.053
	RM 1,001-RM 3,000	309	242.69	
	RM 3,001-RM 5,000	69	218.72	
	RM 5,001-RM 10,000	21	222.64	
	RM 10,001-RM 20,000	4	256.50	
	RM 20,001 and above	1	256.50	
<i>Musharakah</i>	RM 1,000 and below	70	214.97	0.102
	RM 1,001-RM 3,000	309	247.01	
	RM 3,001-RM 5,000	69	220.57	
	RM 5,001-RM 10,000	21	224.00	
	RM 10,001-RM 20,000	4	243.75	
	RM 20,001 and above	1	303.00	
<i>Wadiah</i>	RM 1,000 and below	70	237.87	0.341
	RM 1,001-RM 3,000	309	240.53	
	RM 3,001-RM 5,000	69	221.83	
	RM 5,001-RM 10,000	21	261.57	
	RM 10,001-RM 20,000	4	160.00	
	RM 20,001 and above	1	160.00	
<i>Rahnu</i>	RM 1,000 and below	70	266.50	0.031
	RM 1,001-RM 3,000	309	240.04	
	RM 3,001-RM 5,000	69	206.39	
	RM 5,001-RM 10,000	21	215.71	
	RM 10,001-RM 20,000	4	207.25	
	RM 20,001 and above	1	148.00	
<i>Sarf</i>	RM 1,000 and below	70	243.23	0.476
	RM 1,001-RM 3,000	309	238.50	
	RM 3,001-RM 5,000	69	229.39	
	RM 5,001-RM 10,000	21	227.43	
	RM 10,001-RM 20,000	4	250.00	
	RM 20,001 and above	1	250.00	
<i>Hiwalah</i>	RM 1,000 and below	70	247.34	0.071
	RM 1,001-RM 3,000	309	239.86	
	RM 3,001-RM 5,000	69	223.15	
	RM 5,001-RM 10,000	21	212.36	
	RM 10,001-RM 20,000	4	257.50	
	RM 20,001 and above	1	257.50	
<i>Ijarah</i>	RM 1,000 and below	70	230.79	0.000
	RM 1,001-RM 3,000	309	252.48	
	RM 3,001-RM 5,000	69	192.02	
	RM 5,001-RM 10,000	21	196.93	
	RM 10,001-RM 20,000	4	180.00	
	RM 20,001 and above	1	298.50	
<i>Ijarah thumma al-bai'</i>	RM 1,000 and below	70	256.73	0.000
	RM 1,001-RM 3,000	309	245.09	
	RM 3,001-RM 5,000	69	187.93	
	RM 5,001-RM 10,000	21	218.36	
	RM 10,001-RM 20,000	4	263.50	
	RM 20,001 and above	1	263.50	
<i>Kafalah</i>	RM 1,000 and below	70	249.46	0.065
	RM 1,001-RM 3,000	309	239.99	
	RM 3,001-RM 5,000	69	218.35	
	RM 5,001-RM 10,000	21	217.86	
	RM 10,001-RM 20,000	4	263.00	

	RM 20,001 and above	1	263.00	
<i>Qard</i>	RM 1,000 and below	70	264.23	0.000
	RM 1,001-RM 3,000	309	244.92	
	RM 3,001-RM 5,000	69	181.70	
	RM 5,001-RM 10,000	21	225.86	
	RM 10,001-RM 20,000	4	211.75	
	RM 20,001 and above	1	271.00	
<i>Murabahah</i>	RM 1,000 and below	70	241.59	0.518
	RM 1,001-RM 3,000	309	240.96	
	RM 3,001-RM 5,000	69	216.22	
	RM 5,001-RM 10,000	21	254.00	
	RM 10,001-RM 20,000	4	214.50	
	RM 20,001 and above	1	96.00	
<i>Mudharabah</i>	RM 1,000 and below	70	245.07	0.026
	RM 1,001-RM 3,000	309	246.28	
	RM 3,001-RM 5,000	69	205.33	
	RM 5,001-RM 10,000	21	211.21	
	RM 10,001-RM 20,000	4	143.50	
	RM 20,001 and above	1	143.50	
<i>Ujr</i>	RM 1,000 and below	70	233.80	0.232
	RM 1,001-RM 3,000	309	241.39	
	RM 3,001-RM 5,000	69	230.02	
	RM 5,001-RM 10,000	21	212.36	
	RM 10,001-RM 20,000	4	257.50	
	RM 20,001 and above	1	257.50	
<i>Wakalah</i>	RM 1,000 and below	70	251.14	0.002
	RM 1,001-RM 3,000	309	243.58	
	RM 3,001-RM 5,000	69	195.70	
	RM 5,001-RM 10,000	21	228.57	
	RM 10,001-RM 20,000	4	285.00	
	RM 20,001 and above	1	285.00	
<i>Sukuk</i>	RM 1,000 and below	70	268.50	0.000
	RM 1,001-RM 3,000	309	242.42	
	RM 3,001-RM 5,000	69	196.37	
	RM 5,001-RM 10,000	21	223.36	
	RM 10,001-RM 20,000	4	150.00	
	RM 20,001 and above	1	31.50	

### ***Income level***

The observation of the Kruskal-Wallis test in Table 7.5 reveals that there was a significant difference in knowledge and awareness level across six different monthly income levels; as the p-values were lower than 0.10. Based on the lowest mean-value score, the respondents who had the monthly income of RM3,001-RM5,000 had better level of knowledge and awareness of *bai' al-inah* (mean:213.86), *bai' bithaman ajil* (mean: 158.57), *istisna'* (mean: 218.72), *ijarah thumma al-bai'* (mean: 187.93), *qard* (mean: 181.70), and *wakalah* (mean: 195.70).

Furthermore, the respondents who had the monthly earning between RM 5,001-RM 10,000 had better level of knowledge and awareness of *bai' al-dayn* (mean: 213.86), *bai' al-salam* (mean: 212.57), *hiwalah* (mean: 212.36), and *kafalah* (mean: 217.86).



On the other hand, those who earned between of RM 10,001-RM 20,000 per month showed a better level of knowledge and awareness of *ijarah* (mean: 180.00) and *mudharabah* (mean: 143.50). As for those who earned RM 20,001 and above, displayed a higher level of awareness of *rahnu* (mean: 148.00), *mudharabah* (mean: 143.50) and *sukuk* (mean: 31.50).

As anticipated before, the customers with more income showed a better level of awareness and knowledge of products and services. The result from Table 7.5 confirms that middle income earners ( RM 3,001 to RM 5,000) had highest mean scores on most of the products and services compare to other income groups, thus, this indicates that they possessed a higher level of knowledge and awareness than lower income earners ( RM 1,000 and below and RM 1,001 to RM 3,000). The reason is that the lower income earners had limited funds and it led to limited exposure to the products and services offered by the banks.

**Table 7.6: Kruskal-Wallis Test (Education level)**

	Highest Education Level	N	Mean Rank	Asymp. Sig.
<i>Bai' al-dayn</i>	Primary/Secondary School	113	263.85	0.000
	College Diploma/ Matriculation/ A-Level	116	242.91	
	Bachelor	207	243.65	
	Professional Qualification	8	266.00	
	Postgraduate	40	186.86	
	Others	3	266.00	
<i>Bai' al-inah</i>	Primary/Secondary School	113	272.49	0.000
	College Diploma/ Matriculation/ A-Level	116	229.13	
	Bachelor	207	247.57	
	Professional Qualification	8	300.50	
	Postgraduate	40	172.66	
	Others	3	300.50	
<i>Bai' bithaman ajil</i>	Primary/Secondary School	113	276.28	0.000
	College Diploma/ Matriculation/ A-Level	116	229.34	
	Bachelor	207	249.19	
	Professional Qualification	8	297.56	
	Postgraduate	40	151.46	
	Others	3	328.00	
<i>Bai' al-salam</i>	Primary/Secondary School	113	272.69	0.000
	College Diploma/ Matriculation/ A-Level	116	247.61	
	Bachelor	207	237.00	
	Professional Qualification	8	246.56	
	Postgraduate	40	197.86	
	Others	3	114.67	
<i>Tawarruq</i>	Primary/Secondary School	113	253.73	0.147
	College Diploma/ Matriculation/ A-Level	116	239.31	
	Bachelor	207	244.50	
	Professional Qualification	8	264.50	

	Postgraduate	40	221.89	
	Others	3	264.50	
<i>Istisna'</i>	Primary/Secondary School	113	261.85	0.000
	College Diploma/ Matriculation/ A-Level	116	249.31	
	Bachelor	207	240.47	
	Professional Qualification	8	233.56	
	Postgraduate	40	209.21	
	Others	3	101.67	
<i>Musharakah</i>	Primary/Secondary School	113	275.37	0.001
	College Diploma/ Matriculation/ A-Level	116	253.22	
	Bachelor	207	230.83	
	Professional Qualification	8	220.69	
	Postgraduate	40	208.51	
	Others	3	149.67	
<i>Wadiah</i>	Primary/Secondary School	113	251.19	0.673
	College Diploma/ Matriculation/ A-Level	116	236.37	
	Bachelor	207	246.17	
	Professional Qualification	8	286.75	
	Postgraduate	40	225.88	
	Others	3	246.17	
<i>Rahnu</i>	Primary/Secondary School	113	275.83	0.008
	College Diploma/ Matriculation/ A-Level	116	239.06	
	Bachelor	207	238.87	
	Professional Qualification	8	244.31	
	Postgraduate	40	201.70	
	Others	3	153.00	
<i>Sarf</i>	Primary/Secondary School	113	250.54	0.015
	College Diploma/ Matriculation/ A-Level	116	244.41	
	Bachelor	207	245.24	
	Professional Qualification	8	257.00	
	Postgraduate	40	214.39	
	Others	3	257.00	
<i>Hiwalah</i>	Primary/Secondary School	113	266.00	0.000
	College Diploma/ Matriculation/ A-Level	116	251.31	
	Bachelor	207	236.59	
	Professional Qualification	8	235.56	
	Postgraduate	40	199.04	
	Others	3	266.00	
<i>Ijarah</i>	Primary/Secondary School	113	285.45	0.000
	College Diploma/ Matriculation/ A-Level	116	248.22	
	Bachelor	207	237.60	
	Professional Qualification	8	246.13	
	Postgraduate	40	154.81	
	Others	3	144.67	
<i>Ijarahthumma al-bai'</i>	Primary/Secondary School	113	268.85	0.000
	College Diploma/ Matriculation/ A-Level	116	254.21	
	Bachelor	207	238.06	
	Professional Qualification	8	210.13	
	Postgraduate	40	179.69	
	Others	3	271.00	
<i>Kafalah</i>	Primary/Secondary School	113	259.23	0.000
	College Diploma/ Matriculation/ A-Level	116	255.31	
	Bachelor	207	241.77	
	Professional Qualification	8	239.56	
	Postgraduate	40	178.69	
	Others	3	270.00	
<i>Qard</i>	Primary/Secondary School	113	269.38	0.000
	College Diploma/ Matriculation/ A-Level	116	252.81	
	Bachelor	207	241.53	
	Professional Qualification	8	247.56	
	Postgraduate	40	156.25	

	Others	3	278.00	
<i>Murabahah</i>	Primary/Secondary School	113	282.16	0.001
	College Diploma/ Matriculation/ A-Level	116	243.84	
	Bachelor	207	226.04	
	Professional Qualification	8	281.63	
	Postgraduate	40	214.66	
	Others	3	342.50	
<i>Mudharabah</i>	Primary/Secondary School	113	281.10	0.001
	College Diploma/ Matriculation/ A-Level	116	241.96	
	Bachelor	207	236.90	
	Professional Qualification	8	208.38	
	Postgraduate	40	190.11	
	Others	3	228.67	
<i>Ujr</i>	Primary/Secondary School	113	253.73	0.003
	College Diploma/ Matriculation/ A-Level	116	249.81	
	Bachelor	207	243.33	
	Professional Qualification	8	234.06	
	Postgraduate	40	203.63	
	Others	3	264.50	
<i>Wakalah</i>	Primary/Secondary School	113	271.95	0.000
	College Diploma/ Matriculation/ A-Level	116	241.02	
	Bachelor	207	246.45	
	Professional Qualification	8	232.63	
	Postgraduate	40	171.75	
	Others	3	131.17	
<i>Sukuk</i>	Primary/Secondary School	113	266.88	0.000
	College Diploma/ Matriculation/ A-Level	116	248.21	
	Bachelor	207	247.27	
	Professional Qualification	8	245.06	
	Postgraduate	40	147.66	
	Others	3	275.50	

### ***Education Levels***

The Kruskal-Wallis test result in Table 7.6 suggests that there was a significant difference in the knowledge and awareness level across six different education levels for all the products and services offered by the Islamic banks except for *tawarruq* and *wadiah*. This was proven by the p-values that were lower than critical p-value of 0.10.

Based on the mean-value score (lowest score), those respondents that had better academic qualification *i.e.* postgraduate; possessed a better level of knowledge and awareness of *bai' al-dayn* (mean: 186.86), *bai' al-inah* (mean:172.66), *bai' bithaman ajil* (mean: 151.46), *sarf* (mean: 214.39), *hiwalah* (mean: 199.04), *ijarah thumma al-bai'* (mean: 179.69), *kafalah* (mean: 178.69), *qard* (mean: 156.25), *murabahah* (mean: 214.66), *mudharabah* (mean: 190.11), *ujr* (mean: 203.63) and *sukuk* (mean: 147.66).

On the other hand, the respondents that held other qualification *i.e.* certificate or special course; showed a better level of knowledge and awareness of *bai' al-salam* (mean: 114.67), *istisna'* (mean: 101.670), *musharakah* (mean: 149.67), *rahn* (mean: 153.00), *ijarah* (mean: 144.67) and *wakalah* (mean: 131.17).

As expected earlier, the respondents that possessed a better academic qualification displayed a better level of knowledge and awareness of products and services offered by their Islamic banks. This is because they scored the lowest mean on most of the products and services offered by the Islamic banks. Besides that, another reason was the understanding and knowledge of the products and services of Islamic banks that they had.

**Table 7.7: Kruskal-Wallis Test (Relationship duration)**

	Relationship Duration	N	Mean Rank	Asymp. Sig.
<i>Bai' al-dayn</i>	Less than 1 Year	38	259.59	0.245
	1-3 years	91	244.59	
	3-5 years	119	249.63	
	More than 5 years	239	238.49	
<i>Bai' al-inah</i>	Less than 1 Year	38	274.87	0.007
	1-3 years	91	257.69	
	3-5 years	119	255.48	
	More than 5 years	239	228.16	
<i>Bai' bithaman ajil</i>	Less than 1 Year	38	289.55	0.000
	1-3 years	91	263.78	
	3-5 years	119	264.57	
	More than 5 years	239	218.99	
<i>Bai' al-salam</i>	Less than 1 Year	38	270.59	0.104
	1-3 years	91	242.21	
	3-5 years	119	250.40	
	More than 5 years	239	237.27	
<i>Tawarruq</i>	Less than 1 Year	38	251.68	0.613
	1-3 years	91	248.45	
	3-5 years	119	246.08	
	More than 5 years	239	240.05	
<i>Istisna'</i>	Less than 1 Year	38	257.59	0.208
	1-3 years	91	239.92	
	3-5 years	119	251.72	
	More than 5 years	239	239.55	
<i>Musharakah</i>	Less than 1 Year	38	267.14	0.203
	1-3 years	91	255.81	
	3-5 years	119	246.52	
	More than 5 years	239	234.57	
<i>Wadiah</i>	Less than 1 Year	38	299.57	0.001
	1-3 years	91	255.98	
	3-5 years	119	250.94	
	More than 5 years	239	227.15	
<i>Rahn</i>	Less than 1 Year	38	293.97	0.003
	1-3 years	91	246.65	

	3-5 years	119	259.40	
	More than 5 years	239	227.37	
<i>Sarf</i>	Less than 1 Year	38	250.59	0.378
	1-3 years	91	248.97	
	3-5 years	119	246.77	
	More than 5 years	239	239.68	
<i>Hiwalah</i>	Less than 1 Year	38	259.59	0.051
	1-3 years	91	236.57	
	3-5 years	119	255.77	
	More than 5 years	239	238.49	
<i>Ijarah</i>	Less than 1 Year	38	274.96	0.034
	1-3 years	91	253.48	
	3-5 years	119	253.80	
	More than 5 years	239	230.59	
<i>Ijarah thumma al-bai'</i>	Less than 1 Year	38	264.59	0.246
	1-3 years	91	249.59	
	3-5 years	119	242.35	
	More than 5 years	239	239.42	
<i>Kafalah</i>	Less than 1 Year	38	270.00	0.141
	1-3 years	91	243.24	
	3-5 years	119	245.45	
	More than 5 years	239	239.44	
<i>Qard</i>	Less than 1 Year	38	258.78	0.193
	1-3 years	91	256.59	
	3-5 years	119	243.21	
	More than 5 years	239	237.25	
<i>Murabahah</i>	Less than 1 Year	38	265.61	0.547
	1-3 years	91	248.85	
	3-5 years	119	246.33	
	More than 5 years	239	237.56	
<i>Mudharabah</i>	Less than 1 Year	38	269.25	0.012
	1-3 years	91	259.88	
	3-5 years	119	260.04	
	More than 5 years	239	225.95	
<i>Ujr</i>	Less than 1 Year	38	251.68	0.324
	1-3 years	91	237.74	
	3-5 years	119	252.22	
	More than 5 years	239	241.07	
<i>Wakalah</i>	Less than 1 Year	38	287.09	0.002
	1-3 years	91	250.69	
	3-5 years	119	254.62	
	More than 5 years	239	229.31	
<i>Sukuk</i>	Less than 1 Year	38	269.09	0.030
	1-3 years	91	251.42	
	3-5 years	119	250.95	
	More than 5 years	239	233.73	

### ***Relationship Duration***

The observation of the Kruskal-Wallis test result in Table 7.7 reveals that there was a significant difference in knowledge and awareness level across four different relationship duration groups for the products and services offered by the Islamic banks. This is verified from the p-values that were lower than the critical p-value of 0.10.

Based on the mean-value score (lowest score), the respondents who had 1 to 3 years relationship with their bank, had a better level of knowledge and awareness of *hiwalah* (mean: 236.57). On the other hand, those who had longer relationship duration *i.e.* more than 5 years, displayed a better level of awareness of *bai' al-inah* (mean: 228.16), *bai' bithamanajil* (mean: 218.99), *wadiah* (mean: 227.15), *rahnu* (mean: 227.37), *ijarah* (mean: 230.59) *mudharabah* (mean: 225.95), *wakalah* (mean: 229.31), and *sukuk* (mean: 233.73).

The results demonstrated that for the relationship duration category, the respondents that had a longer banking relationship (more than 5 years) with the Islamic banks, displayed a better level of knowledge and awareness of the products and services offered. This is because the longer the relationship, the more exposure they received in terms of advertisement in the media, reading materials obtained while visiting the banks, and through clarification from the banks' employees.

### **7.2.2 Knowledge and Awareness of Products and Services of Conventional Banks**

The second category is the respondents' knowledge and awareness of the products and services offered by the conventional banks. It should be noted that the respondents were coded as '1' if they were familiar with the products and services offered by their bank and were coded as '0' if they were not familiar. Therefore, the higher the mean rank suggests that the respondents are more familiar with the products or services.

As explained in Chapter 6, most of the conventional banks' respondents displayed a higher awareness and knowledge of the conventional banks' products and services. This section investigates further which category of respondents had a better awareness on the products and services. Similar testing methods were used *i.e.* Mann-Whitney U test and Kruskal-Wallis test to examine whether there were any significant differences across various groups in the respective category. The summary of the findings for these tests are depicted from Table 7.8 to Table 7.13.

**Table 7.8: Mann-Whitney U Test (Gender)**

	Gender	N	Mean Rank	Asymp. Sig.
Saving Account	Male	209	229.93	0.065
	Female	245	225.43	
Current Account	Male	209	234.29	0.126
	Female	245	221.71	
Fixed Deposit	Male	209	224.27	0.553
	Female	245	230.26	
Credit Card	Male	209	234.69	0.077
	Female	245	221.37	
Home Loan	Male	209	234.96	0.098
	Female	245	221.13	
Unit Trust	Male	209	224.87	0.649
	Female	245	229.74	
Interest Rate	Male	209	230.15	0.637
	Female	245	225.24	
Insurance	Male	209	231.91	0.380
	Female	245	223.74	
Internet Banking	Male	209	228.88	0.770
	Female	245	226.33	
Foreign Exchange	Male	209	232.67	0.362
	Female	245	223.09	
Vehicle Financing	Male	209	233.69	0.133
	Female	245	222.22	
Trustee Service	Male	209	229.66	0.685
	Female	245	225.66	
Leasing	Male	209	214.44	0.017
	Female	245	238.64	
Hire-Purchase	Male	209	220.35	0.216
	Female	245	233.60	
Personal Loan	Male	209	232.27	0.261
	Female	245	223.43	
Wealth Management	Male	209	219.66	0.166
	Female	245	234.19	
Receivable Finance	Male	209	237.03	0.070
	Female	245	219.37	
Financing	Male	209	227.78	0.961
	Female	245	227.26	
Export and Import Services	Male	209	221.45	0.189
	Female	245	232.66	
Telephone Banking	Male	209	224.22	0.569
	Female	245	230.30	
Bond	Male	209	223.61	0.484
	Female	245	230.82	
Education Financing	Male	209	231.15	0.515
	Female	245	224.39	

***Gender***

The first control variable for the conventional banks is the ‘gender’ category. The results from the Mann-Whitney U test (Table 7.8) indicate that there was statistically a significant difference between male and female in terms of their knowledge and awareness level concerning the products and services offered by the conventional

banks. This could be seen as their significant values were lower than the significant level of 0.10 confidence level.

Based on the mean-value score in Table 7.8, the higher the mean value meant the better the level of knowledge and awareness of the products and services. The results showed that female respondents had better level of knowledge and awareness of one product, leasing (mean: 238.64). On the other hand, the males showed a better level of knowledge and awareness of saving account (mean: 229.93), credit card (mean: 234.69), home loan (mean: 234.96), and receivable finance (mean: 237.03).

Hence, the finding showed that male respondents had a better level of knowledge and awareness of the products and services offered. This is because, they obtained higher mean compared to females on most of the products and services offered.

**Table 7.9: Kruskal-Wallis Test (Age Group)**

	Age	N	Mean Rank	Asymp. Sig.
Saving Account	Below 20	4	224.50	0.032
	21-30	279	226.94	
	31-40	122	224.50	
	41-50	31	239.15	
	Above 50	18	237.11	
Current Account	Below 20	4	186.50	0.068
	21-30	279	236.13	
	31-40	122	210.69	
	41-50	31	230.44	
	Above 50	18	211.72	
Fixed Deposit	Below 20	4	265.00	0.145
	21-30	279	234.49	
	31-40	122	222.20	
	41-50	31	210.08	
	Above 50	18	176.72	
Credit Card	Below 20	4	194.50	0.078
	21-30	279	234.37	
	31-40	122	213.11	
	41-50	31	238.44	
	Above 50	18	207.11	
Home Loan	Below 20	4	241.75	0.000
	21-30	279	241.95	
	31-40	122	201.75	
	41-50	31	214.29	
	Above 50	18	197.61	
Unit Trust	Below 20	4	340.00	0.000
	21-30	279	244.81	
	31-40	122	191.15	
	41-50	31	230.16	
	Above 50	18	176.06	



Interest Rate	Below 20	4	196.75	0.643
	21-30	279	230.31	
	31-40	122	227.45	
	41-50	31	227.87	
	Above 50	18	190.44	
Insurance	Below 20	4	226.75	0.442
	21-30	279	232.65	
	31-40	122	212.80	
	41-50	31	235.90	
	Above 50	18	233.06	
Internet Banking	Below 20	4	236.75	0.010
	21-30	279	222.31	
	31-40	122	220.93	
	41-50	31	275.19	
	Above 50	18	268.28	
Foreign Exchange	Below 20	4	192.75	0.201
	21-30	279	231.19	
	31-40	122	232.75	
	41-50	31	209.23	
	Above 50	18	173.83	
Vehicle Financing	Below 20	4	193.50	0.432
	21-30	279	232.55	
	31-40	122	217.69	
	41-50	31	230.11	
	Above 50	18	218.72	
Trustee Service	Below 20	4	183.50	0.390
	21-30	279	230.28	
	31-40	122	228.16	
	41-50	31	231.10	
	Above 50	18	183.50	
Leasing	Below 20	4	190.00	0.093
	21-30	279	227.83	
	31-40	122	238.38	
	41-50	31	222.95	
	Above 50	18	164.78	
Hire-Purchase	Below 20	4	228.50	0.002
	21-30	279	244.37	
	31-40	122	204.31	
	41-50	31	188.23	
	Above 50	18	190.67	
Personal Loan	Below 20	4	191.00	0.539
	21-30	279	230.05	
	31-40	122	220.77	
	41-50	31	242.26	
	Above 50	18	216.22	
Wealth Management	Below 20	4	205.00	0.908
	21-30	279	224.93	
	31-40	122	232.91	
	41-50	31	237.95	
	Above 50	18	217.61	
Receivable Finance	Below 20	4	217.75	0.917
	21-30	279	228.53	
	31-40	122	222.40	
	41-50	31	241.55	
	Above 50	18	224.06	
Financing	Below 20	4	173.75	0.786
	21-30	279	228.47	
	31-40	122	228.64	
	41-50	31	234.16	
	Above 50	18	205.28	
Export and Import Services	Below 20	4	159.00	0.516

	21-30	279	227.75	
	31-40	122	231.57	
	41-50	31	228.56	
	Above 50	18	209.44	
Telephone Banking	Below 20	4	164.75	0.792
	21-30	279	230.86	
	31-40	122	223.36	
	41-50	31	225.16	
	Above 50	18	221.50	
Bond	Below 20	4	310.50	0.423
	21-30	279	228.32	
	31-40	122	230.49	
	41-50	31	207.98	
	Above 50	18	209.61	
Education Financing	Below 20	4	197.75	0.863
	21-30	279	223.99	
	31-40	122	235.89	
	41-50	31	228.87	
	Above 50	18	229.28	

### *Age Group*

The Kruskal-Wallis test result in Table 7.9 suggests that there was a significant difference in the knowledge and awareness level across five different age groups for products and services offered by the conventional banks. This could be evidenced from the p-value of 0.032 for saving account; 0.068 for current account; 0.078 for credit card; 0.000 for home loan; 0.000 for unit trust; 0.010 for internet banking; 0.093 for leasing; and 0.002 for hire-purchase. All the p-values were lower than critical p-value of 0.10.

In addition, from the above eight products and services that were significant from the age groups, the result showed that those who aged below 20 had a better level of knowledge and awareness of unit trust (mean: 340.00) compared to the other age category. As for those who aged between 21 to 30 years old, they had a better level of knowledge and awareness of current account (mean: 236.13), home loan (mean: 241.95), and hire-purchase (mean: 244.37). In addition, those who aged between 31 to 40 years were more knowledgeable and aware of leasing (mean: 238.38).

On the other hand, respondents between 41 to 50 years old know more about saving account (mean: 239.15), credit card (mean: 238.44) and internet banking (mean: 275.19). Thus, based on the mean value scores (highest score), the respondents from 21 to 30 years old and 41 to 50 years old, had more highest mean value on of the

products and services, which meant that they were more well-informed about the conventional products and services.

**Table 7.10: Kruskal-Wallis Test (Income Level)**

	Monthly Income	N	Mean Rank	Asymp. Sig.
Saving Account	RM 1,000 and below	32	220.00	0.920
	RM 1,001-RM 3,000	314	223.54	
	RM 3,001-RM 5,000	73	223.05	
	RM 5,001-RM 10,000	19	220.00	
	RM 10,001-RM 20,000	7	220.00	
Current Account	RM 1,000 and below	32	210.81	0.010
	RM 1,001-RM 3,000	314	231.89	
	RM 3,001-RM 5,000	73	204.34	
	RM 5,001-RM 10,000	19	183.00	
	RM 10,001-RM 20,000	7	183.00	
Fixed Deposit	RM 1,000 and below	32	225.48	0.000
	RM 1,001-RM 3,000	314	237.57	
	RM 3,001-RM 5,000	73	182.53	
	RM 5,001-RM 10,000	19	160.71	
	RM 10,001-RM 20,000	7	149.00	
Credit Card	RM 1,000 and below	32	239.17	0.015
	RM 1,001-RM 3,000	314	228.76	
	RM 3,001-RM 5,000	73	202.69	
	RM 5,001-RM 10,000	19	190.50	
	RM 10,001-RM 20,000	7	190.50	
Home Loan	RM 1,000 and below	32	243.58	0.077
	RM 1,001-RM 3,000	314	227.06	
	RM 3,001-RM 5,000	73	208.43	
	RM 5,001-RM 10,000	19	192.71	
	RM 10,001-RM 20,000	7	181.00	
Unit Trust	RM 1,000 and below	32	229.20	0.000
	RM 1,001-RM 3,000	314	237.84	
	RM 3,001-RM 5,000	73	193.29	
	RM 5,001-RM 10,000	19	111.00	
	RM 10,001-RM 20,000	7	142.79	
Interest Rate	RM 1,000 and below	32	226.89	0.040
	RM 1,001-RM 3,000	314	230.74	
	RM 3,001-RM 5,000	73	206.60	
	RM 5,001-RM 10,000	19	159.92	
	RM 10,001-RM 20,000	7	200.07	
Insurance	RM 1,000 and below	32	208.22	0.272
	RM 1,001-RM 3,000	314	222.48	
	RM 3,001-RM 5,000	73	239.65	
	RM 5,001-RM 10,000	19	189.92	
	RM 10,001-RM 20,000	7	230.07	
Internet Banking	RM 1,000 and below	32	238.58	0.458
	RM 1,001-RM 3,000	314	225.60	
	RM 3,001-RM 5,000	73	212.58	
	RM 5,001-RM 10,000	19	199.42	
	RM 10,001-RM 20,000	7	207.79	
Foreign Exchange	RM 1,000 and below	32	222.89	0.212
	RM 1,001-RM 3,000	314	229.58	
	RM 3,001-RM 5,000	73	208.70	
	RM 5,001-RM 10,000	19	179.34	
	RM 10,001-RM 20,000	7	196.07	

Vehicle Financing	RM 1,000 and below	32	231.22	0.387
	RM 1,001-RM 3,000	314	226.35	
	RM 3,001-RM 5,000	73	210.84	
	RM 5,001-RM 10,000	19	212.92	
	RM 10,001-RM 20,000	7	189.50	
Trustee Service	RM 1,000 and below	32	201.11	0.231
	RM 1,001-RM 3,000	314	228.43	
	RM 3,001-RM 5,000	73	206.16	
	RM 5,001-RM 10,000	19	244.66	
	RM 10,001-RM 20,000	7	196.14	
Leasing	RM 1,000 and below	32	213.06	0.537
	RM 1,001-RM 3,000	314	227.06	
	RM 3,001-RM 5,000	73	214.21	
	RM 5,001-RM 10,000	19	226.24	
	RM 10,001-RM 20,000	7	169.36	
Hire-Purchase	RM 1,000 and below	32	223.25	0.000
	RM 1,001-RM 3,000	314	235.30	
	RM 3,001-RM 5,000	73	200.39	
	RM 5,001-RM 10,000	19	147.13	
	RM 10,001-RM 20,000	7	112.00	
Personal Loan	RM 1,000 and below	32	243.13	0.274
	RM 1,001-RM 3,000	314	225.06	
	RM 3,001-RM 5,000	73	211.88	
	RM 5,001-RM 10,000	19	199.21	
	RM 10,001-RM 20,000	7	219.29	
Wealth Management	RM 1,000 and below	32	186.84	0.219
	RM 1,001-RM 3,000	314	229.09	
	RM 3,001-RM 5,000	73	214.47	
	RM 5,001-RM 10,000	19	206.61	
	RM 10,001-RM 20,000	7	248.43	
Receivable Finance	RM 1,000 and below	32	221.08	0.781
	RM 1,001-RM 3,000	314	225.11	
	RM 3,001-RM 5,000	73	222.51	
	RM 5,001-RM 10,000	19	193.63	
	RM 10,001-RM 20,000	7	222.07	
Financing	RM 1,000 and below	32	191.48	0.159
	RM 1,001-RM 3,000	314	230.50	
	RM 3,001-RM 5,000	73	215.58	
	RM 5,001-RM 10,000	19	185.26	
	RM 10,001-RM 20,000	7	210.36	
Export and Import Services	RM 1,000 and below	32	205.42	0.259
	RM 1,001-RM 3,000	314	229.03	
	RM 3,001-RM 5,000	73	207.04	
	RM 5,001-RM 10,000	19	221.16	
	RM 10,001-RM 20,000	7	204.43	
Telephone Banking	RM 1,000 and below	32	217.75	0.000
	RM 1,001-RM 3,000	314	237.59	
	RM 3,001-RM 5,000	73	191.84	
	RM 5,001-RM 10,000	19	141.63	
	RM 10,001-RM 20,000	7	138.29	
Bond	RM 1,000 and below	32	228.52	0.001
	RM 1,001-RM 3,000	314	232.01	
	RM 3,001-RM 5,000	73	204.42	
	RM 5,001-RM 10,000	19	129.34	
	RM 10,001-RM 20,000	7	241.43	
Education Financing	RM 1,000 and below	32	214.48	0.739
	RM 1,001-RM 3,000	314	227.28	
	RM 3,001-RM 5,000	73	211.15	
	RM 5,001-RM 10,000	19	208.26	
	RM 10,001-RM 20,000	7	233.36	

### ***Income Level***

The next control variable is the ‘income level’ category. The result from the Kruskal-Wallis test in Table 7.10 indicates that there was statistically a significant difference between the various income levels in terms of their knowledge and awareness concerning the products and services offered by the conventional banks. This can be seen as their significant values were significantly lower than the significant level of 0.10 confidence level.

Based on the mean-value score in Table 7.10, the higher the mean value, indicates a better level of awareness and knowledge. Thus, the result showed that respondents with lower income (RM 1,000 and below) possessed a substantial knowledge about credit card (mean: 239.17) and home loan (mean: 243.58). On the other hand, middle income respondents (RM 1,001 to RM 3,000) were more aware of fixed deposit (mean: 237.57), current account (mean: 231.89), unit trust (mean: 237.84), interest rate (mean: 230.74), hire-purchase (mean: 235.50) and also telephone banking (mean: 237.59). Furthermore, higher income respondents (RM 10,001 to RM 20,000) showed a better level of awareness of bond (mean: 241.43).

As anticipated earlier, customers with more income demonstrated a better level of knowledge and awareness of products and services offered. The result from Table 7.10 verifies that those who earned between RM 1,001 to RM 3,000 obtained the highest mean score on most of the products and services compare to other income groups. Thus, this indicated that they had a better level of knowledge and awareness. The reason is that, the middle income earners are financially viable compare to the lower income groups. Hence, it led to more exposure of the products and services and accordingly, added value to their knowledge and awareness of these products and services.

**Table 7.11: Kruskal-Wallis Test (Education level)**

	Highest Education Level	N	Mean Rank	Asymp. Sig.
Saving Account	Primary/Secondary School	113	230.53	0.798
	College Diploma/ Matriculation/ A-Level	136	226.17	
	Bachelor	173	227.12	

	Professional Qualification	7	224.50	
	Postgraduate	18	224.50	
	Others	7	224.50	
Current Account	Primary/Secondary School	113	232.70	0.083
	College Diploma/ Matriculation/ A-Level	136	239.91	
	Bachelor	173	217.99	
	Professional Qualification	7	251.36	
	Postgraduate	18	186.50	
	Others	7	218.93	
Fixed Deposit	Primary/Secondary School	113	247.92	0.002
	College Diploma/ Matriculation/ A-Level	136	241.63	
	Bachelor	173	207.92	
	Professional Qualification	7	248.79	
	Postgraduate	18	164.11	
	Others	7	248.79	
Credit Card	Primary/Secondary School	113	246.73	0.002
	College Diploma/ Matriculation/ A-Level	136	231.22	
	Bachelor	173	211.56	
	Professional Qualification	7	226.93	
	Postgraduate	18	207.11	
	Others	7	291.79	
Home Loan	Primary/Secondary School	113	231.20	0.291
	College Diploma/ Matriculation/ A-Level	136	236.74	
	Bachelor	173	219.12	
	Professional Qualification	7	249.86	
	Postgraduate	18	197.61	
	Others	7	249.86	
Unit Trust	Primary/Secondary School	113	259.65	0.000
	College Diploma/ Matriculation/ A-Level	136	238.18	
	Bachelor	173	207.47	
	Professional Qualification	7	177.86	
	Postgraduate	18	163.44	
	Others	7	210.29	
Interest Rate	Primary/Secondary School	113	250.49	0.016
	College Diploma/ Matriculation/ A-Level	136	233.47	
	Bachelor	173	210.86	
	Professional Qualification	7	237.29	
	Postgraduate	18	177.83	
	Others	7	269.71	
Insurance	Primary/Secondary School	113	232.27	0.916
	College Diploma/ Matriculation/ A-Level	136	226.75	
	Bachelor	173	227.73	
	Professional Qualification	7	234.86	
	Postgraduate	18	207.83	
	Others	7	202.43	
Internet Banking	Primary/Secondary School	113	276.42	0.000
	College Diploma/ Matriculation/ A-Level	136	216.72	
	Bachelor	173	203.62	
	Professional Qualification	7	212.43	
	Postgraduate	18	217.83	
	Others	7	277.29	
Foreign Exchange	Primary/Secondary School	113	248.50	0.002
	College Diploma/ Matriculation/ A-Level	136	234.48	
	Bachelor	173	210.79	
	Professional Qualification	7	298.14	
	Postgraduate	18	161.22	
	Others	7	265.71	
Vehicle Financing	Primary/Secondary School	113	237.69	0.377
	College Diploma/ Matriculation/ A-Level	136	230.22	
	Bachelor	173	218.43	
	Professional Qualification	7	225.93	

	Postgraduate	18	218.72	
	Others	7	258.36	
Trustee Service	Primary/Secondary School	113	226.69	0.760
	College Diploma/ Matriculation/ A-Level	136	226.90	
	Bachelor	173	223.52	
	Professional Qualification	7	264.57	
	Postgraduate	18	246.56	
	Others	7	264.57	
Leasing	Primary/Secondary School	113	223.15	0.181
	College Diploma/ Matriculation/ A-Level	136	226.72	
	Bachelor	173	222.15	
	Professional Qualification	7	271.07	
	Postgraduate	18	265.67	
Hire-Purchase	Primary/Secondary School	113	231.51	0.413
	College Diploma/ Matriculation/ A-Level	136	228.50	
	Bachelor	173	227.84	
	Professional Qualification	7	212.29	
	Postgraduate	18	178.06	
	Others	7	277.14	
Personal Loan	Primary/Secondary School	113	235.19	0.188
	College Diploma/ Matriculation/ A-Level	136	227.72	
	Bachelor	173	218.55	
	Professional Qualification	7	255.86	
	Postgraduate	18	228.83	
	Others	7	288.29	
Wealth Management	Primary/Secondary School	113	228.10	0.540
	College Diploma/ Matriculation/ A-Level	136	233.38	
	Bachelor	173	224.03	
	Professional Qualification	7	188.79	
	Postgraduate	18	205.00	
	Others	7	286.07	
Receivable Finance	Primary/Secondary School	113	231.31	0.620
	College Diploma/ Matriculation/ A-Level	136	227.76	
	Bachelor	173	221.36	
	Professional Qualification	7	225.86	
	Postgraduate	18	236.67	
	Others	7	290.71	
Financing	Primary/Secondary School	113	241.55	0.398
	College Diploma/ Matriculation/ A-Level	136	232.17	
	Bachelor	173	218.03	
	Professional Qualification	7	214.29	
	Postgraduate	18	192.67	
	Others	7	246.71	
Export and Import Services	Primary/Secondary School	113	230.31	0.777
	College Diploma/ Matriculation/ A-Level	136	224.10	
	Bachelor	173	226.58	
	Professional Qualification	7	207.64	
	Postgraduate	18	234.67	
	Others	7	272.50	
Telephone Banking	Primary/Secondary School	113	254.65	0.001
	College Diploma/ Matriculation/ A-Level	136	229.85	
	Bachelor	173	214.28	
	Professional Qualification	7	172.86	
	Postgraduate	18	158.44	
	Others	7	302.57	
Bond	Primary/Secondary School	113	248.23	0.011
	College Diploma/ Matriculation/ A-Level	136	240.40	
	Bachelor	173	209.47	
	Professional Qualification	7	180.79	
	Postgraduate	18	184.39	
	Others	7	245.64	

Education Financing	Primary/Secondary School	113	245.46	0.003
	College Diploma/ Matriculation/ A-Level	136	236.14	
	Bachelor	173	209.23	
	Professional Qualification	7	173.43	
	Postgraduate	18	204.06	
	Others	7	335.57	

### ***Education level***

The Kruskal-Wallis test result in Table 7.11 suggests that there was a significant difference in knowledge and awareness level across six different education levels for products and services offered by the conventional banks. This could be evidenced from the p-value of 0.083 for current account, 0.002 for fixed deposit, 0.002 for credit card, 0.000 for unit trust, 0.016 for interest rates, 0.000 for internet banking, 0.002 for foreign exchange, 0.001 for telephone banking, 0.011 for bond and 0.003 for education financing. All of the p-values were lower than the critical p-value of 0.10.

In addition, the result showed that the respondents from the primary / secondary school category showed a higher level of knowledge and awareness compared to other education levels for unit trust (mean: 259.65) and bond (mean: 248.23). As for professionally qualified respondents category, they were well-informed on current account (mean: 251.36), fixed deposit (mean: 248.79), and foreign exchange (mean: 298.14). Furthermore, the respondents that had other qualifications *i.e.* certificate or special course, showed a better level of knowledge and awareness on fixed deposit (mean: 248.79), credit card (mean: 291.79), interest rates (mean: 269.71), internet banking (mean: 277.29), telephone banking (mean: 302.57), and education financing (mean: 335.57).

Thus, based on the mean value score (highest score), the respondents that had other qualifications such as certificate or special courses, obtained the highest mean value on the products and services compared to the respondents that were from primary/secondary school category. This indicated that the respondents that had other qualifications had a better level of knowledge and awareness in the case of products and services offered by the conventional bank.



**Table 7.12: Mann-Whitney U Test (Type of ownership)**

	Type of Ownership	N	Mean Rank	Asymp. Sig.
Saving Account	Locally-owned conventional bank	411	227.81	0.426
	Foreign-owned conventional bank	43	224.50	
Current Account	Locally-owned conventional bank	411	227.92	0.750
	Foreign-owned conventional bank	43	223.45	
Fixed Deposit	Locally-owned conventional bank	411	229.93	0.136
	Foreign-owned conventional bank	43	204.29	
Credit Card	Locally-owned conventional bank	411	230.40	0.017
	Foreign-owned conventional bank	43	199.78	
Home Loan	Locally-owned conventional bank	411	225.32	0.105
	Foreign-owned conventional bank	43	248.35	
Unit Trust	Locally-owned conventional bank	411	228.99	0.389
	Foreign-owned conventional bank	43	213.30	
Interest Rate	Locally-owned conventional bank	411	228.37	0.604
	Foreign-owned conventional bank	43	219.19	
Insurance	Locally-owned conventional bank	411	228.55	0.486
	Foreign-owned conventional bank	43	217.51	
Internet Banking	Locally-owned conventional bank	411	227.50	0.999
	Foreign-owned conventional bank	43	227.51	
Foreign Exchange	Locally-owned conventional bank	411	228.24	0.664
	Foreign-owned conventional bank	43	220.47	
Vehicle Financing	Locally-owned conventional bank	411	227.19	0.802
	Foreign-owned conventional bank	43	230.45	
Trustee Service	Locally-owned conventional bank	411	230.17	0.093
	Foreign-owned conventional bank	43	201.98	
Leasing	Locally-owned conventional bank	411	228.94	0.377
	Foreign-owned conventional bank	43	213.76	
Hire-Purchase	Locally-owned conventional bank	411	229.33	0.289
	Foreign-owned conventional bank	43	210.02	
Personal Loan	Locally-owned conventional bank	411	227.45	0.970
	Foreign-owned conventional bank	43	227.95	
Wealth Management	Locally-owned conventional bank	411	227.37	0.938
	Foreign-owned conventional bank	43	228.76	
Receivable Finance	Locally-owned conventional bank	411	226.73	0.622
	Foreign-owned conventional bank	43	234.91	
Financing	Locally-owned conventional bank	411	227.46	0.983
	Foreign-owned conventional bank	43	227.86	
Export and Import Services	Locally-owned conventional bank	411	228.32	0.553
	Foreign-owned conventional bank	43	219.71	
Telephone Banking	Locally-owned conventional bank	411	228.96	0.398
	Foreign-owned conventional bank	43	213.58	
Bond	Locally-owned conventional bank	411	229.31	0.276
	Foreign-owned conventional bank	43	210.20	
Education Financing	Locally-owned conventional bank	411	227.71	0.899
	Foreign-owned conventional bank	43	225.47	

***Type of Ownership***

The Mann-Whitney U test result in Table 7.12 suggests that there was a significant difference in awareness level on the products and services for locally-owned conventional banks and foreign-owned conventional banks. This could be seen from

the p-value of 0.017 for credit card, and 0.093 for trustee services. All of the p-values for these products and services were less than the critical p-value of 0.10.

The mean rank of credit card for locally-owned conventional banks was 230.40 and 199.78 for foreign-owned conventional bank. As for the trustee service, it scored 230.17 for locally-owned conventional banks, and 201.98 for the foreign-owned conventional banks. The result showed that the respondents of locally-owned conventional banks category had higher mean scores on the products and services *i.e.* credit card and trustee services, and hence showed a better level of knowledge and awareness on the products and services as compared to the respondents of foreign-owned conventional banks.

As expected, the respondents from the locally-owned conventional banks should have a better awareness compared to those from foreign-owned conventional banks. This is because the locally-owned conventional banks had existed longer than the foreign-owned conventional banks in Malaysia. The results in Table 7.12 have confirmed the assumption.

**Table 7.13: Kruskal-Wallis Test (Relationship Duration)**

	Relationship Duration	N	Mean Rank	Asymp. Sig.
Saving Account	Less than 1 Year	23	224.50	0.842
	1-3 years	95	226.89	
	3-5 years	109	226.58	
	More than 5 years	227	228.50	
Current Account	Less than 1 Year	23	255.59	0.137
	1-3 years	95	239.07	
	3-5 years	109	226.07	
	More than 5 years	227	220.50	
Fixed Deposit	Less than 1 Year	23	269.93	0.051
	1-3 years	95	237.52	
	3-5 years	109	234.80	
	More than 5 years	227	215.50	
Credit Card	Less than 1 Year	23	243.85	0.253
	1-3 years	95	230.34	
	3-5 years	109	236.15	
	More than 5 years	227	220.50	
Home Loan	Less than 1 Year	23	244.22	0.024
	1-3 years	95	247.13	
	3-5 years	109	230.82	
	More than 5 years	227	216.00	
Unit Trust	Less than 1 Year	23	251.17	0.005
	1-3 years	95	256.37	
	3-5 years	109	233.79	
	More than 5 years	227	210.00	

Interest Rate	Less than 1 Year	23	238.70	0.104
	1-3 years	95	245.14	
	3-5 years	109	235.80	
	More than 5 years	227	215.00	
Insurance	Less than 1 Year	23	229.22	0.339
	1-3 years	95	241.68	
	3-5 years	109	230.39	
	More than 5 years	227	220.00	
Internet Banking	Less than 1 Year	23	229.35	0.175
	1-3 years	95	242.13	
	3-5 years	109	213.32	
	More than 5 years	227	228.00	
Foreign Exchange	Less than 1 Year	23	224.83	0.500
	1-3 years	95	238.75	
	3-5 years	109	233.88	
	More than 5 years	227	220.00	
Vehicle Financing	Less than 1 Year	23	262.59	0.001
	1-3 years	95	248.46	
	3-5 years	109	226.82	
	More than 5 years	227	215.50	
Trustee Service	Less than 1 Year	23	237.78	0.306
	1-3 years	95	222.93	
	3-5 years	109	242.85	
	More than 5 years	227	221.00	
Leasing	Less than 1 Year	23	254.15	0.471
	1-3 years	95	217.48	
	3-5 years	109	232.69	
	More than 5 years	227	226.50	
Hire-Purchase	Less than 1 Year	23	253.17	0.033
	1-3 years	95	239.25	
	3-5 years	109	244.12	
	More than 5 years	227	212.00	
Personal Loan	Less than 1 Year	23	240.35	0.227
	1-3 years	95	241.18	
	3-5 years	109	220.16	
	More than 5 years	227	224.00	
Wealth Management	Less than 1 Year	23	219.80	0.851
	1-3 years	95	227.70	
	3-5 years	109	235.20	
	More than 5 years	227	224.50	
Receivable Finance	Less than 1 Year	23	200.48	0.264
	1-3 years	95	242.24	
	3-5 years	109	229.72	
	More than 5 years	227	223.00	
Financing	Less than 1 Year	23	215.70	0.644
	1-3 years	95	234.08	
	3-5 years	109	235.71	
	More than 5 years	227	222.00	
Export and Import Services	Less than 1 Year	23	213.28	0.346
	1-3 years	95	234.27	
	3-5 years	109	237.10	
	More than 5 years	227	221.50	
Telephone Banking	Less than 1 Year	23	226.43	0.975
	1-3 years	95	232.25	
	3-5 years	109	226.71	
	More than 5 years	227	226.00	
Bond	Less than 1 Year	23	221.67	0.478
	1-3 years	95	231.65	
	3-5 years	109	239.69	
	More than 5 years	227	220.50	
Education	Less than 1 Year	23	210.09	0.785

Financing	1-3 years	95	222.24	
	3-5 years	109	232.63	
	More than 5 years	227	229.00	

### ***Relationship Duration***

The Kruskal-Wallis test (Table 7.13) illustrated that there was a significant difference in knowledge and awareness level across four different relationship duration groups for the products and services offered by the conventional banks. The p-values that were lower than critical p-value of 0.10 verified this result.

Based on the mean-value score (highest score), the respondents that had relationship with their bank for less than 1 year, showed a better level of knowledge and awareness on fixed deposit (mean: 269.93), vehicle financing (mean: 262.59), and hire-purchase (mean: 253.17). On the other hand, the respondents that had a longer relationship duration *i.e.* 1 to 3 years, demonstrated a better level of awareness on home loan (mean: 247.13) and unit trust (mean: 256.37).

Thus, based on the above results, it can be concluded that for the relationship duration category, the respondents who had a shorter banking relationship with the conventional banks *i.e.* less than 1 year, possessed a better awareness of the products and services offered. Nevertheless, the result contradicted the earlier expectation.

## **7.3 IDENTIFYING BANKING SELECTION CRITERIA**

There are many factors that may affect customers in choosing which bank to open their account with. Therefore, this section discusses the main factors that influenced the respondents in selecting the Islamic or conventional bank. Furthermore, there are a lot of similar studies that have been conducted to explain about the selection criteria from various angles. This study replicates some of these previous studies (*i.e.* Dusuki, 2005; Karim, 2011) in terms of their methods and in adopting some of the same variables.

This study used the factor analysis testing. For the variable selection process, a possible list of variables has been compiled, including those that were tested in previous studies, and newly created variables. Based on the objective of the study, eleven basic elements were selected and tested using the factor analysis. The variables are as follows: Religious obligation; Brand name and image; Price of the financial products; Competitive rate of return; Number of branches available; Customer service quality; Courteous and competent personnel; Convenience (e.g. comfort interior design); Location being near work or home; Encouragement from friends and family; and Internet banking.

However, it should be noted that for the Factor Analysis of Malaysian Banks as a whole (N: 941), one of the variables (Religious obligation) was excluded, as the question for this variable was directed to the respondents of the Islamic banks only. The same case applied for the Factor Analysis for conventional banks (N: 453). From the total of 11 variables, only 10 variables were used in the analysis. However, the Factor Analysis for the Islamic banks (N: 487) included all 11 variables in this study.

Factor analysis was considered the most appropriate approach because of its ability to reduce a huge number of related variables to a more controllable number. To facilitate the test of the data factorability in terms of sampling adequacy, there are two statistical measures available in the SPSS software that can be used; Bartlett's test of Sphericity and also the Kaiser-Meyer-Olkin (KMO) test. For the factor analysis to be considered appropriate, the Bartlett's test of Sphericity value should be significant ( $P < .05$ ) while for the KMO test, the suggested minimum outcome must be at least 0.6 (KMO score ranging from 0 to 1).

The KMO test's benchmarks are as follows: KMO measure in the 0.90s the sampling is considered to be excellent. If the outcome is in the 0.80s, then the sampling is considered meritorious, if it is in 0.70s then the sample is middling, if it is in the 0.60s then the sample is mediocre, if it is in 0.50s then the sample is deemed as miserable, and lastly if it is below than 0.50, then the sample is unacceptable. The two above mentioned tests are set as a minimum guideline which should be achieved before a factor analysis can proceed. Table 7.14 presents the results of KMO and also Bartlett's test for this factor analysis.

***Factor Analysis for Banking Selection Criteria for Malaysian Banks as a Whole***

**Table 7.14: KMO and Bartlett's Test Results for Banking Selection Criteria for Malaysian Banks as a Whole**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.821
Bartlett's Test of Sphericity	Approx. Chi-Square	4047.154
	Df	45
	Sig.	.000

As seen in Table 7.14, the outcome of the KMO measure for all 10 items combined (excluding 'Religious obligation' variable), related to the banking selection criteria, showed the value of 0.821, which is under the category of 'meritorious' as suggested by Kaiser's benchmark. Thus, based on the adequacy of the sample, the sample size was considered as suitable for the factor analysis to be conducted.

Furthermore, Bartlett's Test of Sphericity results is also encouraging for the factor analysis to be conducted. The p-value of 0.000 as presented in Table 7.14 had full significance level. Derived from the very encouraging results from the both testing, factor analysis might be carried out. Nevertheless, in factor analysis, there are various methods that can be used to extract the number of underlying factors; the most commonly used approach is principal component analysis (PCA), which will be used in this study.

**Table 7.15: Total Variance Explained for Banking Selection Criteria for Malaysian Banks as a Whole**

Item	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.356	43.556	43.556	4.356	43.556	43.556	3.242	32.419	32.419
2	1.324	13.238	56.794	1.324	13.238	56.794	1.875	18.749	51.168
3	1.035	10.354	67.149	1.035	10.354	67.149	1.598	15.980	67.149
4	.773	7.735	74.883						
5	.642	6.418	81.301						
6	.605	6.052	87.353						
7	.511	5.111	92.463						

8	.344	3.435	95.899						
9	.208	2.083	97.981						
10	.202	2.019	100.000						
Extraction Method: Principal Component Analysis.									

Referring back to Table 7.15, based on the suggested outcomes from the extractions method, it was decided to retain the three factors. This means that the original ten items could be simply reduced to three factors. The three components solution explained 67.14% of the variance with component 1 contributing 32.41%, component 2 contributing 18.74%, and component 3 contributing 15.98%. The three factors retained were rotated using Orthogonal Varimax technique. Further results are presented in Table 7.16 below.

**Table 7.16: Rotated Component Matrix on Factors Influencing Banking Selection Criteria (Malaysian Banks as a Whole)**

Items	Component			Communalities
	Service Oriented Factors	Financial Oriented Factors	Marketing Oriented Factors	
Brand name and image	.074	.215	<b>.706</b>	.551
Price of the financial products	.156	<b>.914</b>	.170	.889
Competitive rate of return	.231	<b>.890</b>	.125	.861
No. of branch available	<b>.637</b>	.337	.024	.520
Customer Service Quality	<b>.830</b>	.213	.071	.740
Courteous and competent personnel	<b>.861</b>	.131	.118	.773
Convenience	<b>.745</b>	.071	.340	.675
Location being near work or home	<b>.695</b>	.062	.251	.550
Encouragement from friends and family	.216	.021	<b>.807</b>	.698
Internet banking	<b>.487</b>	.125	.453	.458
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 5 iterations.				

Table 7.16 shows that all the available variables were effectively inserted into three main factors. This was done based on the loading for each of the variables for each factor. The items, which had a higher loading value, indicated that they strongly belonged to that particular factor. In order for each of the item to be deemed as belonging to a particular factor, each of the items must have at least a minimum loading value of 0.32 (Mohd-Karim, 2010). The final result, as indicated in Table 7.16, shows that all ten items had an acceptable loading value of 0.4 and above, which

was higher than the minimal benchmark of 0.32. The result indicates that all the items clearly fit into one of the three factors.

The first factor from the table consisted of five variables (items) with the loading ranging from 0.487 to 0.861. The items that fit into this factor were ranked according to the highest loading value:

- *Courteous and competent;*
- *Customer service quality;*
- *Convenience;*
- *Location being near home or work;*
- *Number of branches available; and*
- *Internet banking.*

All the items that were clustered in the first factor seemed related to services. Therefore, the factor was named as ‘Services Oriented Factors’.

The second factor with loading value ranging from 0.890 to 0.914 consisted of another two items namely:

- *Attractive product package; and*
- *Competitive rate of return.*

These items could be associated with the financial product related matters. Thus, the factor was termed as ‘Financial Oriented Factors’.

The final factor was assigned with ‘Marketing Oriented Factors’ since the remaining two items were clustered in the factors could be explained with marketing matters related. The items loading value ranging from 0.706 to 0.807. The variables for this factor were:

- *Encouragement from family and friends; and*
- *Image and brand of the bank.*

Subsequently, there was a need to evaluate which factor was considered the most imperative. Even though the factor analysis result ranked the factors according to the percentage of variance and eigenvalue, it did not indicate that the first factor as the most significant factor among the three. The next step was to calculate the factor



score. In order to identify which factor was considered the most significant one, the average mean from the mean value for each individual item in a particular factor was calculated. Referring to Table 7.17, based on the average mean computation, ‘Services Oriented Factors’ was ranked first with the average mean value of 4.31 followed by the ‘Financial Oriented Factors’ and ‘Marketing Oriented Factors’ which had an average mean value of 4.16 and 3.91, respectively.

**Table 7.17: Ranking and Average Mean for Each Factor**

<b>Factor One: Services Oriented Factors</b>	<b>Mean Value</b>
Number of branch available	4.13
Customer service quality	4.46
Courteous and competent personnel	4.48
Convenience (e.g. comfort interior design)	4.27
Location being near home or work	4.30
Internet banking facilities	4.26
<b>Average Mean</b>	<b>4.31</b>
<b>Factor Two: Financial Oriented Factors</b>	<b>Mean Value</b>
Attractive package of the financial product / services	4.16
Competitive rate of return	4.15
<b>Average Mean</b>	<b>4.16</b>
<b>Factor Three: Marketing Oriented Factors</b>	<b>Mean Value</b>
The brand & image of the bank	4.24
Encouragement from family & friends	3.58
<b>Average Mean</b>	<b>3.91</b>

***Kruskal-Wallis and Mann-Whitney U Test for ‘Religious Obligation Factor’***

As explained earlier, another variable ‘Religious Obligation’ was also added as one of the patronage factor of the Islamic banks. Therefore, this variable (Religious Obligation) was excluded from the factor analysis of Malaysian banks as a whole. This question investigated whether the respondents of Islamic banks considered ‘Religious Obligation’ one of the banking selection criteria or not. Table 7.18 shows the result for the Mann-Whitney U test and Kruskal-Wallis test for the ‘Religious Obligation’ as the banking selection criteria when deciding to open an account with Islamic bank.

**Table 7.18: Kruskal-Wallis and Mann-Whitney U Test (Religious Obligation as Banking Selection Criteria)**

	Subgroup	N	Mean Rank	Asymp. Sig.
<b>Religious Obligation</b>	<b>Gender</b>		<b>U-Test:</b>	0.216
	Male	206	251.54	
	Female	281	238.48	
	<b>Age Group</b>		<b>K-W Test:</b>	0.492
	Below 20	10	193.95	
	21-30	274	241.59	
	31-40	138	245.90	
	41-50	45	264.01	
	Above 50	20	243.90	
	<b>Monthly Income</b>		<b>K-W Test:</b>	0.100
	RM 1,000 and below	70	226.39	
	RM 1,001-RM 3,000	309	234.38	
	RM 3,001-RM 5,000	69	267.73	
	RM 5,001-RM 10,000	21	205.83	
	RM 10,001-RM 20,000	4	258.88	
	<b>Education Level</b>		<b>K-W Test:</b>	0.059
	Primary/Secondary School	113	226.95	
	College Diploma/ Matriculation/ A-Level	116	254.00	
	Bachelor	207	242.21	
	Professional Qualification	8	183.13	
	Postgraduate	40	278.84	
	<b>Relationship Duration</b>		<b>K-W Test:</b>	0.029
	Less than 1 Year	38	214.30	
	1-3 years	91	237.71	
	3-5 years	119	228.30	
	More than 5 years	239	258.93	
	<b>Type of Ownership</b>		<b>U-Test:</b>	0.596
	Locally-owned Islamic bank	449	243.19	
	Foreign-owned Islamic bank	38	253.51	
	<b>Type of Islamic bank</b>		<b>U-Test:</b>	0.589
	Stand -alone Islamic bank	238	246.89	
	Islamic subsidiaries bank	249	241.24	

The results from Table 7.18 indicate that there was no significant difference across the ‘gender’, ‘age groups’ and also ‘monthly income’ categories; all groups believe that religiosity was a vital reason that influenced them in opening an account with an Islamic bank. This can be seen from the p-values of 0.216, 0.492 and 0.100 for ‘gender’, ‘age groups’ and ‘monthly income’ categories respectively, which were

significantly higher than the critical p-value of 0.10. The results suggested that both gender; male and female, the majority of respondents across the age groups and also monthly income categories affirmed that religious obligation was an important aspect and that it influenced them to open an account with Islamic bank.

In addition, the results in Table 7.18 also indicate that there was no significant difference across the 'type of ownership' and 'type of Islamic bank'. This can be seen from the p-values of 0.596 and 0.589 for 'type of ownership' and 'type of Islamic bank' respectively. The results signify that both customers from locally-owned and foreign-owned Islamic bank, as well as respondents from stand-alone Islamic bank and Islamic subsidiaries had no significant difference in their perception on the level of important of the 'religious obligation' as one of the important banking selection criteria.

On the other hand, for the 'education level', and also 'relationship duration' categories, the statistical results indicated that there was significant difference in believing that the 'Religious Obligation' was an important aspect. In the 'education level' category, the p-value of 0.059 was lower than the critical p-value of 0.10, which denoted that there was significant difference across the groups. The statistical figures suggested that the respondents from the higher education level group, *i.e.* 'others' (mean: 321.00) and 'postgraduate' (mean: 278.84) believed that the 'Religious Obligation' to be more important than the respondents from lower education level groups. As expected before, those who possessed a higher level of education were assumed to consider 'Religious Obligation' an important criterion for patronising Islamic bank because they have better knowledge on the religious doctrine through formal education or everyday exposure.

As for the 'relationship duration' category, again the p-value of 0.029 was significantly lower than the critical p-value limit of 0.10. The results also suggested that the significant differences were in favour of the respondents from the group which had longer banking relationship duration, *i.e.* 'more than 5 years' (mean: 258.93). The results indicated that the respondents, who had longer relationship duration, stated that 'Religious Obligation' was a crucial factor more often than those who had shorter banking relationship duration. The longer the relationship duration,

the more exposure the respondent received from the Islamic bank. Thus, as assumed earlier, this exposure were believed to add knowledge and stronger their conviction on Islamic obligation as important factor for banking selection criteria.

### ***Factor Analysis for Banking Selection Criteria for Malaysian Islamic Banks***

After establishing the Factor Analysis for the banking selection criteria for Malaysian banks as whole (combination of Islamic and conventional banks in Malaysia), it was also important to conduct the Factor Analysis for the Malaysian Islamic banks separately in order to identify whether there was a different in the result.

**Table 7.19: KMO and Bartlett's Test Results for Banking Selection Criteria for Malaysian Islamic Banks**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.818
Bartlett's Test of Sphericity	Approx. Chi-Square	2658.509
	df	55
	Sig.	.000

As presented in Table 7.19, the outcome of the KMO measure for all 11 items (including 'Religious Obligation' criteria), showed the value of 0.818, which was suitable for the factor analysis to be carried out. In addition, the Bartlett's Test of Sphericity result showed a full significance level (0.000).

**Table 7.20: Total Variance Explained for Banking Selection Criteria for Malaysian Islamic Banks**

Item	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.819	43.810	43.810	4.819	43.810	43.810	3.784	34.396	34.396
2	1.442	13.108	56.919	1.442	13.108	56.919	1.978	17.980	52.377
3	1.214	11.038	67.956	1.214	11.038	67.956	1.714	15.580	67.956
4	.865	7.860	75.817						
5	.577	5.242	81.058						
6	.565	5.136	86.194						
7	.500	4.544	90.738						

8	.354	3.214	93.952						
9	.320	2.911	96.863						
10	.177	1.605	98.467						
11	.169	1.533	100.000						
Extraction Method: Principal Component Analysis.									

Referring back to Table 7.20, the original 11 items could be reduced to 3 factors. The 3 components solution explained 67.95% of the variance with component 1 contributing to 34.39%, component 2 at 17.98%, and component 3 at 15.58%. The 3 components retained were rotated using the Orthogonal Varimax approach. Further findings are presented in Table 7.21 below.

**Table 7.21: Rotated Component Matrix on Factors Influencing Banking Selection Criteria (Malaysian Islamic Banks)**

Items	Component			Communalities
	Service Oriented Factors	Financial Oriented Factors	Religious Obligation and Image Factors	
Religious Obligation	.110	.124	<b>.892</b>	.824
Brand & Image	.208	.122	<b>.856</b>	.790
Profit rate	.155	<b>.907</b>	.202	.887
Rate of return	.257	<b>.907</b>	.075	.895
No. of Branch available	<b>.600</b>	.327	.144	.488
Customer Service Quality	<b>.765</b>	.173	.224	.665
Courteous and competent	<b>.842</b>	.082	.178	.747
Convenience	<b>.842</b>	.066	.115	.727
Location	<b>.768</b>	.077	.017	.595
Encouragement (F&F)	<b>.526</b>	.307	.020	.371
Internet banking	<b>.640</b>	.232	.148	.486
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 5 iterations.				

To ascertain and structure the remaining components, the rotated component matrix was used. Table 7.21 presents the rotated component matrix and represented the correlations between the variables and the factor. Evidently, all the available variables could be inserted into 3 main components. It should be noted that all 11 items have an

acceptable loading value of 0.6 and above, which was higher than the minimal benchmark of 0.32.

Furthermore, the results show that the first component was related to ‘Service Oriented Factor’. Items that fit into this component are:

- *No. of branch available*
- *Customer service quality*
- *Courteous and competence personnel*
- *Location*
- *Convenience*
- *Encouragement from family and friends*
- *Internet banking*

On the other hand, the items that fit into the second components were related to ‘Financial Oriented Factor’, and they are:

- *Price of the financial products*
- *Competitive rate of return*

Nonetheless, the items that fit into the last components were related to ‘Religious Obligation and Image Factor’. The two items that fit into this component are:

- *Religious obligation*
- *Brand and image*

Thus, the findings from the Factor Analysis for banking selection criteria for Malaysian Islamic banks showed that the items can be reduced into 3 main components, namely: ‘Services Oriented Factor’, ‘Financial Oriented Factor’, and ‘Religious Obligation and Image Factor’. In addition, the fact that this analysis was performed from the responses of Islamic banks’ customers, it was assumed that religious obligation was one of the essential factor in selecting a bank to open an account with.

The next section will discuss the Factor Analysis for banking selection criteria for the Malaysian conventional banks.

### *Factor Analysis for Banking Selection Criteria for Malaysian Conventional Banks*

**Table 7.22: KMO and Bartlett's Test Results for Banking Selection Criteria for Malaysian Conventional Banks**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.805
Bartlett's Test of Sphericity	Approx. Chi-Square	1699.119
	df	45
	Sig.	.000

As in the case of Malaysian Islamic banks, the Malaysian conventional banks also had a very acceptable measure of KMO, which was 0.805. In addition, the Bartlett's Test of Sphericity result (p-value of 0.000), also encouraged the factor analysis to be carried out.

**Table 7.23: Total Variance Explained for Banking Selection Criteria for Malaysian Conventional Banks**

Item	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.092	40.923	40.923	4.092	40.923	40.923	2.995	29.946	29.946
2	1.356	13.562	54.485	1.356	13.562	54.485	1.897	18.974	48.920
3	1.082	10.822	65.308	1.082	10.822	65.308	1.639	16.387	65.308
4	.783	7.826	73.134						
5	.667	6.669	79.803						
6	.656	6.562	86.364						
7	.534	5.340	91.704						
8	.325	3.250	94.954						
9	.261	2.611	97.565						
10	.243	2.435	100.000						
Extraction Method: Principal Component Analysis.									

As explained earlier, the most commonly used approach was the Principal Component Analysis (PCA), which was used in this study. Based on the suggested outcomes from the extractions method, it was decided to retain three components as shown in Table

7.23. The three components solution explained 65.31% of the variance with first component contributing to 29.95%, the second 18.97 % and third at 16.39%. Again, as in the case of the Malaysian Islamic banks, the three components were rotated using Orthogonal Varimax technique. Table 7.24 summarise the findings.

**Table 7.24: Rotated Component Matrix on Factors Influencing Banking Selection Criteria (Malaysian Conventional Banks)**

Item	Component			Communalities
	Services Oriented Factor	Financial Oriented Factor	Marketing and Internet Banking Factor	
Brand & Image	.082	.459	<b>.581</b>	.556
Profit rate	.182	<b>.900</b>	.101	.853
Rate of return	.215	<b>.867</b>	.078	.804
No. of Branch available	<b>.636</b>	.230	.033	.459
Customer Service Quality	<b>.849</b>	.170	.069	.754
Courteous and competent	<b>.843</b>	.130	.126	.744
Convenience	<b>.674</b>	.145	.378	.618
Location	<b>.675</b>	.051	.277	.535
Encouragement (F&F)	.114	.024	<b>.872</b>	.775
Internet banking	.387	.049	<b>.531</b>	.434
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 5 iterations.				

Based on the distribution in Table 7.23, a new set of factors and their correlated items are established in Table 7.24. The result shows that all the available variables can be inserted into three main components. It should be noted that all 10 items have an acceptable loading value of 0.5 and above, which was higher than the minimal benchmark of 0.32.

As depicted in Table 7.24, the results show that the first component was related to ‘Service Oriented Factor’. For this component, 5 items fit into it, namely:

- *No. of branch available*



- *Customer Service Quality*
- *Courteous and competence personnel*
- *Convenience*
- *Location*

The items that fit into the second components were related to ‘Financial Oriented Factor’. They are:

- *Price of the financial products*
- *Competitive rate of return*

Furthermore, the three items that fit into the last components were related to ‘Marketing and Internet Banking Factor’. They are:

- *Encouragement from family and friends*
- *Brand and Image*
- *Internet banking*

Thus, the findings from the Factor Analysis for banking selection criteria for Malaysian conventional banks showed that the items can be reduced into 3 main components, namely: ‘Services Oriented Factor’, ‘Financial Oriented Factor’, and ‘Marketing and Internet Banking Factor’. The result was not much different from the Factor Analysis for the Malaysian banks as a whole except that for the third component, the conventional banks had the element of internet banking added to the marketing factor.

The next section discusses the customers’ expectation and perception on service quality of Malaysian banks.

#### **7.4 CUSTOMERS’ EXPECTATIONS AND PERCEPTIONS ON SERVICE QUALITY OF MALAYSIAN BANKS**

There are number of methods to measure the customers’ expectations and perceptions of service quality of a bank. This section presents and discusses one of the measurements used in this study, which is ‘SERVQUAL’.

SERVQUAL is an instrument for measuring customers' perceptions of service quality. It has a concise multiple-item scale with good reliability and validity that service providers can use to better understand the service expectations and perceptions of customers and as a result, improve their service (Parasuraman *et al.*, 1988:30). It also has a variety of potential applications. It can help banks in assessing customers' expectations about and perceptions of service quality. In addition, it can help in pinpointing areas requiring managerial attention and action to improve service quality in the bank (Parasuraman *et al.*, 1988:36).

In addition, the SERVQUAL model was developed into 22-items instrument for measuring customers' expectations and perceptions of the five dimensions: tangibles, reliability, responsiveness, assurance, and empathy (Berry *et al.*, 1988:36). These dimensions can be explained as follows:

- (i) 'tangibles', is associated with the physical facilities, equipment and appearance of personnel.
- (ii) 'reliability' is related to the ability to perform the desired service dependably, accurately and consistently.
- (iii) 'responsiveness', is linked with the willingness to provide prompt service and help customers.
- (iv) 'assurance' means employees' knowledge, courtesy, and ability to convey trust and confidence.
- (v) 'empathy', is referred to the provision of caring, individualized attention to customers.

#### **7.4.1 Gap Analysis of Service Quality**

This study attempts to investigate the expectation and perception of customers towards the level of service quality of Islamic and conventional banks in Malaysia. Thus, a deliberate effort was made to consider and include a large number of variables in the study with the objective of expanding the explanatory power of the model. The subject consists of many potentially relevant variables (five dimensions are from the original SERVQUAL plus another two new dimension *i.e.* Islamic values and social responsibility) to be assessed and examined in order to understand the expectation and perception of customers towards the service quality of banks in a complete and

integrated approach. This is done by eliciting customers' opinion towards twenty-nine statements as listed in Table 7.25.

**Table 7.25: Statements and Dimensions of Service Quality**

No.	Statements	Dimension
1.	Modern-looking equipment.	Tangible
2.	Visually appealing interior design and facilities.	Tangible
3.	Brochures and forms are clear and easy to understand.	Tangible
4.	Employees are neat-appearing.	Tangible
5.	Applications are processed on time.	Reliability
6.	Advertised promises are consistent with its performance.	Reliability
7.	Business transactions are accurate.	Reliability
8.	Customers' problems are promptly and sincerely solved.	Reliability
9.	Employees insist on error-free records.	Reliability
10.	Employees give customers prompt service.	Responsiveness
11.	Customers are told when services will be performed.	Responsiveness
12.	Employees are willing to help their customers.	Responsiveness
13.	Employees are never too busy to respond to customers requests.	Responsiveness
14.	Employees give customers personal attention.	Empathy
15.	Employees understand the specific needs of their customers.	Empathy
16.	Give their customers individual attention.	Empathy
17.	Have their customer's best interest at heart.	Empathy
18.	Have operating hours convenient to all its customers.	Empathy
19.	Employees are courteous with customers.	Assurance
20.	Employees have the knowledge to answer customers' questions.	Assurance
21.	Employees' behaviour instills confidence in customers.	Assurance
22.	Customers feel safe in their transaction.	Assurance
23.	Provide banking services according to Islamic <i>Shari'ah</i> .	Islamic Values
24.	Have well known and trustworthy <i>Shari'ah</i> Advisory Board.	Islamic Values
25.	Neither pays nor takes interest on savings and loan accounts.	Islamic Values
26.	Provide profit-sharing investment account.	Islamic Values
27.	Products and services prices are competitive.	Islamic Values
28.	Employees have knowledge on Islamic banking products and services.	Islamic Values
29.	Socially responsible	Social responsibility

In an attempt to develop the study outcomes and enrich the literature with further studies related to Islamic banks management, this study expanded the gap analysis (perception minus expectation) not only for the Islamic banks in Malaysia, but also the conventional banks. A combination of Islamic and conventional banks' gap analysis was also done in order to locate the gap of service quality in Malaysian banking in general.

Wilcoxon Signed Ranks test which measured the significant differences between the respondents' expectations and perceptions in relation to all 7 dimensions was used. It should be noted that the p-values of the test for all of the dimensions were 0.000, which was a full significance value. In other words, there was a significant difference between the mean value of the expectation and the perception in all of the dimensions. This was evident with the average mean values scored for perception was lower than the expectation in all of the dimensions. The analysis of Wilcoxon Signed Ranks was attached in the appendix of this study. Table 7.26 showed the result for the gap analysis of service quality in Malaysian banks (combination of Islamic and conventional banks), while the gap analysis of Islamic banks and the gap analysis for conventional banks are depicted in Table 7.27 and Table 7.28 respectively.

**Table 7.26: Gap Analysis for Service Quality of Malaysian Banks (Islamic and Conventional Banks in Malaysia) (N=941)**

Item	Perception Mean	Expectation Mean	Perception Minus Expectation
Modern-looking equipment.	4.29	4.72	-0.43
Visually appealing interior design and facilities.	3.76	3.90	-0.14
Applications are processed on time.	4.02	4.64	-0.62
Brochures and forms are clear and easy to understand.	4.00	4.55	-0.55
Advertised promises are consistent with its performance.	3.95	4.57	-0.62
Business transactions are accurate.	4.18	4.66	-0.48
Customers' problems are promptly and sincerely solved.	3.99	4.69	<b>-0.70</b>
Employees are neat-appearing.	4.01	4.33	-0.32
Employees insist on error-free records.	4.04	4.62	-0.58
Employees give customers prompt service.	3.91	4.67	<b>-0.76</b>
Customers are told when services will be performed.	3.87	4.54	-0.67
Employees are willing to help their customers.	3.97	4.62	-0.65
Employees are never too busy to respond to customers requests.	3.89	4.57	-0.68

Employees give customers personal attention.	3.71	4.23	-0.52
Employees understand the specific needs of their customers.	3.91	4.43	-0.52
Employees are courteous with customers.	4.02	4.55	-0.53
Employees have the knowledge to answer customers' questions.	4.02	4.60	-0.58
Employees' behaviour instills confidence in customers.	3.97	4.55	-0.58
Customers feel safe in their transaction.	4.10	4.63	-0.53
Give their customers individual attention.	3.79	4.27	-0.48
Have their customer's best interest at heart.	3.97	4.55	-0.58
Have operating hours convenient to all its customers.	3.93	4.52	-0.59
Socially responsible.	3.94	4.44	-0.5
Employees have knowledge on Islamic banking products and services.	4.04	4.59	-0.55
Products and services prices are competitive.	3.94	4.48	-0.54
Provide profit-sharing investment account.	4.00	4.48	-0.48
Neither pays nor takes interest on savings and loan accounts.	4.01	4.58	-0.57
Have well known and trustworthy <i>Shari'ah</i> Advisory Board.	3.98	4.54	-0.56
Provide banking services according to Islamic <i>Shari'ah</i> .	4.06	4.59	-0.53

Table 7.26 presents the mean and gap of the mean (differences between perception and expectation) of service quality in the Islamic and conventional banks in Malaysia. It should be noted that from the result of the survey, all of the gap values (perception minus expectation) were negative. This shows that the performance was below expectations (obtaining a negative score) and led to a perception of low service quality.

The highest negative score was -0.76 which was for the statement 'employees of the bank will give customers prompt service' (from 'Responsive' dimension). This was followed by a score of -0.70 for 'customers' problems are promptly and sincerely solved' (from 'Reliability' dimension). The result showed that the respondents were not convinced that their bank gave a prompt service and that their problems were sincerely solved by the employees of the bank.

On the other hand, the statement 'the bank has visually appealing interior design' recorded the lowest negative score at -0.14. The perception mean for this statement was 3.76, while the expectation mean was 3.90. In addition, this statement was from the 'Tangible' dimension. This result showed that the respondents were not really

concern about appealing interior design, leading to an insignificant difference for the mean score.

**Table 7.27: Gap Analysis of Service Quality of Islamic Banks (N=487)**

Item	Perception (P) Mean	Expectation (E) Mean	Perception Minus Expectation(P-E)
Modern-looking equipment.	4.19	4.70	-0.51
Visually appealing interior design and facilities.	3.79	3.98	-0.19
Applications are processed on time.	3.99	4.62	-0.63
Brochures and forms are clear and easy to understand.	4.01	4.55	-0.54
Advertised promises are consistent with its performance.	3.94	4.56	-0.62
Business transactions are accurate.	4.14	4.64	-0.50
Customers' problems are promptly and sincerely solved.	3.97	4.65	<b>-0.68</b>
Employees are neat-appearing.	4.00	4.38	-0.38
Employees insist on error-free records.	4.03	4.56	-0.53
Employees give customers prompt service.	3.89	4.62	<b>-0.73</b>
Customers are told when services will be performed.	3.88	4.52	-0.64
Employees are willing to help their customers.	3.99	4.59	-0.60
Employees are never too busy to respond to customers requests.	3.90	4.53	-0.63
Employees give customers personal attention.	3.76	4.23	-0.47
Employees understand the specific needs of their customers.	3.93	4.38	-0.45
Employees are courteous with customers.	4.06	4.52	-0.46
Employees have the knowledge to answer customers' questions.	4.01	4.55	-0.54
Employees' behaviour instills confidence in customers.	3.98	4.52	-0.54
Customers feel safe in their transaction.	4.08	4.61	-0.53
Give their customers individual attention.	3.84	4.26	-0.42
Have their customer's best interest at heart.	3.99	4.51	-0.52
Have operating hours convenient to all its customers.	3.96	4.48	-0.52
Socially responsible.	3.97	4.49	-0.52
Employees have knowledge on Islamic banking products and services.	4.04	4.59	-0.55
Products and services prices are competitive.	3.94	4.48	-0.54
Provide profit-sharing investment account.	4.00	4.48	-0.48
Neither pays nor takes interest on savings and loan accounts.	4.01	4.58	-0.57
Have well known and trustworthy <i>Shari'ah</i> Advisory Board.	3.98	4.54	-0.56
Provide banking services according to Islamic <i>Shari'ah</i> .	4.06	4.59	-0.53

**Table 7.28: Gap Analysis of Service Quality of Conventional Banks (N=454)**

Item	Perception (P) Mean	Expectation (E) Mean	Perception Minus Expectation (P-E)
Modern-looking equipment.	4.40	4.74	-0.34
Visually appealing interior design and facilities.	3.73	3.82	-0.09
Applications are processed on time.	4.05	4.66	-0.61
Brochures and forms are clear and easy to understand.	4.00	4.55	-0.55
Advertised promises are consistent with its performance.	3.96	4.57	-0.61
Business transactions are accurate.	4.23	4.69	-0.46
Customers' problems are promptly and sincerely solved.	4.02	4.74	-0.72
Employees are neat-appearing.	4.01	4.28	-0.27
Employees insist on error-free records.	4.06	4.69	-0.63
Employees give customers prompt service.	3.93	4.71	<b>-0.78</b>
Customers are told when services will be performed.	3.87	4.56	-0.69
Employees are willing to help their customers.	3.95	4.65	-0.70
Employees are never too busy to respond to customers requests.	3.88	4.61	<b>-0.73</b>
Employees give customers personal attention.	3.66	4.22	-0.56
Employees understand the specific needs of their customers.	3.89	4.49	-0.60
Employees are courteous with customers.	3.98	4.59	-0.61
Employees have the knowledge to answer customers' questions.	4.02	4.65	-0.63
Employees' behaviour instills confidence in customers.	3.96	4.58	-0.62
Customers feel safe in their transaction.	4.12	4.66	-0.54
Give their customers individual attention.	3.74	4.28	-0.54
Have their customer's best interest at heart.	3.96	4.61	-0.65
Have operating hours convenient to all its customers.	3.89	4.56	-0.67
Socially responsible.	3.90	4.39	-0.49

A further analysis was carried out separately for the Islamic banks and conventional banks to identify whether there was a difference on the mean gap between these banks. Table 7.27 presents the mean and the gap of mean (between perception and expectation) of the Islamic banks in Malaysia, while Table 7.28 shows the mean and the gap of mean of the conventional banks in Malaysia. It should be noted that from the result of the survey, both banks *i.e.* the Islamic and conventional banks; had negative gap values (perception minus expectation) for all of the items. This

demonstrates that the performance of both banks was below expectations and indicated a low service quality. The results were in harmony with the gap analysis of service quality in the Malaysian banks in general (combination of the Islamic and conventional banks), which also had a negative gap values for all items, as stated in Table 7.26.

According to Table 7.27, the highest negative score for Islamic banks was -0.73 which was for the statement 'employees of the bank will give customers prompt service' (from 'Responsive' dimension). This was followed by a score of -0.68 for the statement 'customers' problems are promptly and sincerely solved' (from 'Reliability' dimension). On the other hand, the highest negative score for conventional banks as stated in Table 7.28 was -0.78 which was also for the statement 'employees of the bank will give customers prompt service' (from 'Responsive' dimension). The second highest negative score for conventional banks was -0.73 for the statement 'employees are never too busy to respond to customers' requests' (from 'Responsiveness' dimension).

The findings show that the respondents were not satisfied about the time taken in delivering the service and the long time taken for their problem to be solved. This verify that the respondents from the Islamic and conventional banks wanted the banks to be more efficient in their service by giving prompt service as well as solving their customers' problem promptly. In addition, the respondents also felt that the banks' employees should respond quickly to the customers' request. Thus, the Islamic and conventional banks have to perform something immediately to lessen the gap, particularly with regards to these statements.

On the contrary, the lowest negative score for Islamic and conventional banks as shown in Table 7.27 and Table 7.28 was -0.19 and -0.09 respectively for the statement 'the bank has visually appealing interior design' (from 'Tangible' dimension). The low gap meant that there were not many differences between the perception and expectation. These findings showed that external appearances did not place much weight on the respondents' perception of service quality of a bank.



#### 7.4.2 Factor Analysis for Service Quality Dimensions

After establishing the gap analysis for service quality in Malaysian banking, the study expanded the analysis on service quality by using factor analysis to locate the newly generated structures and constructs of the dimensions from the expectations and perceptions of the respondents. The Principle Component Analysis (PCA) was used to reduce the items to some composite scores. Afterwards, the Rotated Component Matrix was utilised to analyse the share variance amongst the items and to provide a new structure of the dimensions.

Kaiser-Meyer-Olkin (KMO) and Bartlett's test were used to ascertain the adequacy of the factor analysis for this purpose. The results of KMO and Bartlett's test for expectation of service quality and perception of service quality are presented in Table 7.29 and Table 7.33 respectively. Hypothetically, KMO's measure of sampling adequacy varied between 0 and 1, and values closer to 1 were considered to be producing better factorability. A value of 0.6 was the minimum in this regard as stated earlier in this chapter.

**Table 7.29: KMO and Bartlett's Test for Expectation of Service Quality**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.968
Bartlett's Test of Sphericity	Approx. Chi-Square	12406.783
	df	406
	Sig.	.000

As evident in Table 7.29, the outcome of the KMO measure for all 29 items combined, related to the expectation of service quality, produced a value of 0.968, which was far greater than 0.6. Hence, based on the adequacy of the sample, the sample size was considered suitable for the factor analysis to be carried out.

In addition, the Bartlett's Test of Sphericity result was also encouraging for the factor analysis to be conducted. The test recorded a statistical significance of 0.000, which supported the factorability of the correlation matrix. Derived from the very encouraging results from the both testing, factor analysis was appropriate for the study.

**Table 7.30: Total Variance Explained for Expectation of Service Quality**

Item	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	16.226	55.952	55.952	16.226	55.952	55.952	7.956	27.435	27.435
2	1.814	6.257	62.209	1.814	6.257	62.209	5.390	18.587	46.022
3	1.345	4.637	66.845	1.345	4.637	66.845	5.272	18.180	64.202
4	1.058	3.650	70.495	1.058	3.650	70.495	1.825	6.294	70.495
5	.788	2.719	73.214						
6	.642	2.215	75.429						
7	.638	2.201	77.630						
8	.581	2.004	79.635						
9	.509	1.757	81.391						
10	.455	1.567	82.959						
11	.423	1.460	84.419						
12	.410	1.415	85.834						
13	.391	1.347	87.182						
14	.338	1.167	88.349						
15	.324	1.118	89.467						
16	.313	1.078	90.546						
17	.310	1.068	91.614						
18	.283	.975	92.589						
19	.263	.909	93.498						
20	.243	.839	94.337						
21	.232	.801	95.137						
22	.217	.749	95.887						
23	.213	.735	96.621						
24	.190	.655	97.276						
25	.176	.607	97.883						
26	.172	.592	98.475						
27	.166	.571	99.046						
28	.144	.496	99.542						
29	.133	.458	100.000						
Extraction Method: Principal Component Analysis.									

Table 7.30 presented the Principal Component Analysis (PCA) for the expectation of service quality. The PCA was considered significant if it recorded an eigenvalue equal or greater than 1.0. Thus, PCA as shown in Table 7.30 identifies the suitable remaining factors. Based on the suggested outcomes, it was decided to retain the 4 components. This means that the original 29 items could be simply reduced to 4 components or dimensions.

As a result, it can be seen that the 4 components have initial eigenvalues beyond 1, these were; 16.22 for the first component, 1.81 for the second component, 1.34 for the third component and 1.05 for the fourth component. In terms of explanatory power in relation to variance, the 4 components solution explained 70.49% of the variance with

component 1 contributing to 27.43%, component 2 at 18.58%, component 3 at 18.18%, and component 4 at 6.29%. Consequently, the 4 components constituted the most important factors in explaining the expectation of service quality in Malaysian banking.

To ascertain and structure the remaining components, the rotated component matrix was used. Table 7.31 contains the rotated component matrix and represents the correlations between the variable and the factor, establishing the correlations of 0.3 and above. It should be noted that correlation of <0.3 was not significant.

**Table 7.31: Rotated Component Matrix for Expectation of Service Quality**

Item	Component				Communalities
	Operational Service	Social and Islamic Values	Internal Service	Appearances	
Modern-looking equipment.	.535	.271	.194	.310	.494
Visually appealing interior design and facilities.	.206	.101	.199	.807	.743
Applications are processed on time.	.766	.248	.298	.104	.748
Brochures and forms are clear and easy to understand.	.713	.302	.232	.190	.689
Advertised promises are consistent with its performance.	.771	.311	.231	.102	.754
Business transactions are accurate.	.786	.338	.173	.109	.773
Customers' problems are promptly and sincerely solved.	.802	.302	.217	.144	.802
Employees are neat-appearing.	.483	.204	.149	.601	.658
Employees insist on error-free records.	.726	.242	.247	.139	.666
Employees give customers prompt service.	.779	.241	.274	.115	.753
Customers are told when services will be performed.	.712	.256	.327	.203	.721
Employees are willing to help their customers.	.719	.298	.329	.153	.737
Employees are never too busy to respond to customers requests.	.660	.211	.392	.199	.674
Employees give customers personal attention.	.181	.159	.703	.334	.664
Employees understand the specific needs of their customers.	.353	.249	.680	.198	.689
Employees are courteous with customers.	.404	.317	.668	-.031	.711
Employees have the knowledge to answer customers' questions.	.441	.330	.658	-.137	.755
Employees' behaviour instills confidence in customers.	.435	.390	.621	.016	.727
Customers feel safe in their transaction.	.476	.452	.488	-.056	.672
Give their customers individual attention.	.141	.217	.698	.355	.681
Have their customer's best interest at heart.	.325	.385	.670	.139	.722
Have operating hours convenient to all its customers.	.296	.451	.594	.170	.672
Socially responsible.	.266	.683	.361	.246	.728
Employees have knowledge on Islamic banking products and services.	.446	.644	.373	.016	.753
Products and services prices are competitive.	.307	.684	.377	.171	.734
Provide profit-sharing investment account.	.252	.697	.339	.158	.689
Neither pays nor takes interest on savings and	.352	.725	.200	-.002	.690

loan accounts.					
Have well known and trustworthy Shari'ah Advisory Board.	.286	<b>.743</b>	.150	.141	.675
Provide banking services according to Islamic Shari'ah.	.272	<b>.729</b>	.238	.081	.669
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.					
a. Rotation converged in 7 iterations.					

Table 7.31 shows that all the available variables were effectively inserted into 4 main dimensions or components. This was done based on the loading for each of the variables for each factor. The items, which had a higher loading value, indicated that they strongly belong to that particular factor. The final results, as indicated in Table 7.30, showed that all 29 items had an acceptable loading value of 0.4 and above, which was higher than the minimal benchmark of 0.32. The result indicated that all the items clearly fit into one of the 4 dimensions.

The 'Operational Service' dimension from the table consists of 11 variables (items) with the loading ranging from 0.535 to 0.802. The items that fit into this dimension were ranked according to the highest loading value and they are:

- *Customers problem are promptly solved;*
- *Business transactions are accurate;*
- *Employees give customers prompt service;*
- *Advertised promises are consistent with its performance;*
- *Applications are processed on time;*
- *Employees insist on error-free records;*
- *Employees are willing to help their customer;*
- *Brochures and forms are clear and easy to understand;*
- *Customers are told when services will be performed;*
- *Employees are never too busy to respond to customers requests;and*
- *Modern-looking equipment.*

All the items that were clustered in the first dimension seem related to reliability of the service and responsiveness. Therefore, the dimension was named as 'Operational Services'.

The next dimension with loading ranging from 0.644 to 0.743 consisted of another 7 items namely:

- *Have well known and trustworthy Shari'ah Advisory Board;*
- *Provide banking services according to Islamic Shari'ah;*
- *Neither pays nor takes interest on savings and loan accounts;*
- *Provide profit-sharing investment account;*
- *Products and services prices are competitive;*
- *Socially responsible; and*
- *Employees have knowledge on Islamic banking products and services.*

These items could be associated with social and Islamic values, thus, the dimension termed as 'Social and Islamic Values' dimension.

The third dimension was assigned with 'Internal Services' since the 9 items that were clustered in the dimension can be explained with how the employees treat the customers. The items loading value ranging from 0.488 to 0.703, and they are:

- *Employees give customers personal attention;*
- *Give their customers individual attention;*
- *Employees understand the specific needs of their customers;*
- *Have their customer's best interest at heart;*
- *Employees are courteous with customers;*
- *Employees have the knowledge to answer customers' questions;*
- *Employees' behaviour instills confidence in customers;*
- *Have operating hours convenient to all its customers; and*
- *Customers feel safe in their transaction.*

The final dimension was related to the banks' appearance such as:

- *Visually appealing interior design and facilities; and*
- *Employees are neat-appearing.*

The items loading value ranging from 0.601 to 0.807. Therefore, the dimension was called 'Appearances'.

Subsequently, based on the distribution depicted in Table 7.31 regarding the expectation of service quality factor loading, a new Table 7.32 is established. The

table mainly restructured the new set of dimensions and their correlated items according to the factor analysis. In order to identify which dimension was considered the most significant, the average mean for each individual item in a particular dimension was calculated. Referring to Table 7.32, based on the average mean computation, ‘Operational Services’ dimension was ranked first with the average mean value of 4.59. The ‘Social and Islamic Values’ dimension was ranked second with the average mean value of 4.53 followed by ‘Internal Services’ and ‘Appearances’ dimension which had average mean value of 4.45 and 4.18, respectively.

**Table 7.32: Ranking of the New Dimensions for Expectation of Service Quality**

<b>First Dimension : ‘Operational Services’</b>	<b>Mean Value</b>
Customers problem are promptly solved.	4.65
Business transactions are accurate.	4.64
Employees give customers prompt service.	4.62
Advertised promises are consistent with its performance.	4.56
Applications are processed on time.	4.62
Employees insist on error-free records.	4.56
Employees are willing to help their customer.	4.59
Brochures and forms are clear and easy to understand.	4.55
Customers are told when services will be performed.	4.52
Employees are never too busy to respond to customers requests.	4.53
Modern-looking equipment.	4.70
<b>Average Mean</b>	<b>4.59</b>
<b>Second Dimension: ‘Social and Islamic Values’</b>	<b>Mean Value</b>
Have well known and trustworthy <i>Shari’ah</i> Advisory Board.	4.54
Provide banking services according to Islamic <i>Shari’ah</i> .	4.59
Neither pays nor takes interest on savings and loan accounts.	4.58
Provide profit-sharing investment account.	4.48
Products and services prices are competitive.	4.48
Socially responsible.	4.49
Employees have knowledge on Islamic banking products and services.	4.59
<b>Average Mean</b>	<b>4.53</b>
<b>Third Dimension: ‘Internal Services’</b>	<b>Mean Value</b>
Employees give customers personal attention.	4.23
Give their customers individual attention.	4.26
Employees understand the specific needs of their customers.	4.38
Have their customer’s best interest at heart.	4.51
Employees are courteous with customers.	4.52
Employees have the knowledge to answer customers’ questions.	4.55
Employees’ behaviour instills confidence in customers.	4.52
Have operating hours convenient to all its customers.	4.48
Customers feel safe in their transaction.	4.61
<b>Average Mean</b>	<b>4.45</b>
<b>Fourth Dimension: ‘Appearances’</b>	<b>Mean Value</b>

Visually appealing interior design and facilities.	3.98
Employees are neat-appearing.	4.38
<b>Average Mean</b>	<b>4.18</b>

### ***Factor Analysis for Perception of Service Quality***

After establishing the factor analysis for expectation of service quality, the study also extends the factor analysis for the perception of service quality in Malaysian banking. This analysis was to explore the differences between the theoretically imposed dimensions and the empirically generated dimensions for the respondent's perception of service quality in Malaysian banking.

**Table 7.33: KMO and Bartlett's Test for Perception of Service Quality**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.977
Bartlett's Test of Sphericity	Approx. Chi-Square	14727.103
	df	406
	Sig.	.000

As evident in Table 7.33, the outcome of the KMO measure for all 29 items combined, which shaped the service quality perceptions in Malaysian banking, showed a value of 0.977, which was from the category of 'marvellous' as suggested by Kaiser's benchmark. In addition, the Bartlett's Test of Sphericity result was also encouraging for the factor analysis to be conducted. The significant p-value (0.000) as presented in Table 7.33 was significantly lower than the critical p-value of 0.10. Hence, based on the appropriateness of the sample, the sample size was considered as suitable for the factor analysis to be carried out.

As shown in Table 7.34, the analysis proceeded with the Principal Component Analysis, which presented the results of the factor analysis for perception of service quality and factor loadings for each dimension.

**Table 7.34: Total Variance Explained for Perception of Service Quality**

Item	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	18.558	63.994	63.994	18.558	63.994	63.994	12.596	43.434	43.434
2	1.607	5.540	69.534	1.607	5.540	69.534	7.569	26.099	69.534
3	.899	3.102	72.635						
4	.806	2.779	75.414						

5	.597	2.058	77.472						
6	.553	1.907	79.379						
7	.507	1.748	81.128						
8	.482	1.661	82.789						
9	.427	1.474	84.263						
10	.402	1.386	85.649						
11	.361	1.243	86.892						
12	.323	1.114	88.007						
13	.288	.995	89.001						
14	.282	.974	89.975						
15	.281	.970	90.945						
16	.261	.898	91.843						
17	.253	.874	92.717						
18	.230	.792	93.509						
19	.224	.771	94.281						
20	.212	.733	95.013						
21	.198	.684	95.697						
22	.192	.664	96.361						
23	.188	.647	97.008						
24	.172	.592	97.600						
25	.167	.577	98.177						
26	.148	.511	98.688						
27	.141	.485	99.173						
28	.127	.438	99.611						
29	.113	.389	100.000						
Extraction Method: Principal Component Analysis.									

As presented in Table 7.34, based on the suggested outcomes, it was decided to retain the 2 dimensions. This means that the original 29 items from the perception of service quality could be simply reduced into 2 dimensions. Consequently, it could be seen that the 2 components had eigenvalues greater than 1, which were;18.55 for the first component and 1.60 for the second. In addition, the 2 component solution explained 69.53% of the variance with component 1 contributing to 43.43%, and component 2 at 26.09%. In an attempt to structure the remaining components, the rotated component matrix was used.

From the result shown in Table 7.35, the analysis proceeded with the rotated component matrix. In addition, the 2 dimensions retained were rotated using the Orthogonal Varimax technique with Kaiser Normalization.

**Table 7.35: Rotated Component Matrix for Perception of Service Quality**

Item	Component		Communalities
	Operational Service	Social and Islamic Values	
Modern-looking equipment	.559	.436	.502
Visually appealing interior design and facilities.	.577	.217	.380
Applications are processed on time.	.782	.313	.709



Brochures and forms are clear and easy to understand.	<b>.732</b>	.398	.695
Advertised promises are consistent with its performance.	<b>.770</b>	.386	.742
Business transactions are accurate.	<b>.734</b>	.366	.673
Customers' problems are promptly and sincerely solved.	<b>.804</b>	.343	.764
Employees are neat-appearing.	<b>.672</b>	.333	.562
Employees insist on error-free records.	<b>.725</b>	.334	.638
Employees give customers prompt service.	<b>.784</b>	.369	.752
Customers are told when services will be performed.	<b>.794</b>	.377	.772
Employees are willing to help their customers.	<b>.764</b>	.380	.728
Employees are never too busy to respond to customers requests.	<b>.781</b>	.377	.752
Employees give customers personal attention.	<b>.737</b>	.362	.675
Employees understand the specific needs of their customers.	<b>.756</b>	.436	.761
Employees are courteous with customers.	<b>.735</b>	.393	.695
Employees have the knowledge to answer customers' questions.	<b>.754</b>	.398	.727
Employees' behaviour instills confidence in customers.	<b>.774</b>	.393	.754
Customers feel safe in their transaction.	<b>.709</b>	.475	.728
Give their customers individual attention.	<b>.725</b>	.381	.671
Have their customer's best interest at heart.	<b>.748</b>	.438	.751
Have operating hours convenient to all its customers.	.468	<b>.575</b>	.550
Socially responsible.	.397	<b>.802</b>	.801
Employees have knowledge on Islamic banking products and services.	.372	<b>.772</b>	.734
Have well known and trustworthy <i>Shari'ah</i> Advisory Board.	.324	<b>.780</b>	.713
Products and services prices are competitive.	.423	<b>.746</b>	.736
Provide profit-sharing investment account.	.355	<b>.793</b>	.755
Neither pays nor takes interest on savings and loan accounts.	.298	<b>.792</b>	.716
Provide banking services according to Islamic <i>Shari'ah</i> .	.430	<b>.738</b>	.730

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Based on the distribution depicted in Table 7.34, a new set of dimensions and their correlated items were established in Table 7.35. The result in Table 7.35 shows that all the available variables were effectively inserted into 2 main dimensions or components. It also shows that all 29 items had an acceptable loading value of 0.5 and above, which was higher than the minimal benchmark of 0.32. The result indicates that all the items clearly fit into one of the 2 dimensions. These dimensions were

renamed according to the group of items they include and represent the new structure of the respondents' perception of service quality in Malaysian banking.

The first dimension consisted of 21 variables (items) with the loading ranging from 0.559 to 0.804. All these items that were clustered in the first dimension seem related to the actual services performed operationally and internally. Therefore, the dimension was called 'Operational and Internal Services'. The items that fit into this dimension are:

- *Customers problem are promptly solved;*
- *Business transactions are accurate;*
- *Employees give customers prompt service;*
- *Advertised promises are consistent with its performance;*
- *Applications are processed on time;*
- *Employees insist on error-free records;*
- *Employees are willing to help their customer;*
- *Brochures and forms are clear and easy to understand;*
- *Customers are told when services will be performed;*
- *Employees are never too busy to respond to customers requests;*
- *Modern-looking equipment;*
- *Employees give customers personal attention;*
- *Give their customers individual attention;*
- *Employees understand the specific needs of their customers;*
- *Have their customer's best interest at heart;*
- *Employees are courteous with customers;*
- *Employees have the knowledge to answer customers' questions;*
- *Employees' behaviour instills confidence in customers;*
- *Have operating hours convenient to all its customers;*
- *Customers feel safe in their transaction;*
- *Visually appealing interior design and facilities; and*
- *Employees are neat-appearing.*

The next dimension with loading ranging from 0.575 to 0.802 consisted of another 8 items namely:

- *Have operating hours convenient to all its customers;*

- *Have well known and trustworthy Shari'ah Advisory Board;*
- *Provide banking services according to Islamic Shari'ah;*
- *Neither pays nor takes interest on savings and loan accounts;*
- *Provide profit-sharing investment account;*
- *Products and services prices are competitive;*
- *Socially responsible; and*
- *Employees have knowledge on Islamic banking products and services.*

These items can be associated with social and Islamic values, thus, the dimension was termed as 'Social and Islamic Values' dimension.

Subsequently, further step was taken to calculate the dimension scores according to the new categories which included a new distribution of the variables. In order to identify which dimension was considered the most significant, the average mean for each individual item in a particular dimension was calculated. Referring to Table 7.36, based on the average mean computation, 'Social and Islamic Values' dimension was ranked first with an average mean of 3.99, and 'Operational and Internal Services' dimension second with an average mean of 3.97.

**Table 7.36: Ranking of the New Extracted Dimension for Perception of Service Quality**

<b>First Dimension: 'Social and Islamic Values'</b>	<b>Mean Value</b>
Have operating hours convenient to all its customers.	3.96
Provide banking services according to Islamic <i>Shari'ah</i> .	4.06
Have well known and trustworthy <i>Shari'ah</i> Advisory Board	3.98
Neither pays nor takes interest on savings and loan accounts.	4.01
Provide profit-sharing investment account.	4.00
Socially responsible.	3.97
Products and services prices are competitive.	3.94
Employees have knowledge on Islamic banking products and services.	4.04
<b>Average Mean</b>	<b>3.99</b>
<b>Second Dimension: 'Operational and Internal Services'</b>	<b>Mean Value</b>
Modern-looking equipment.	4.19
Visually appealing interior design and facilities.	3.79
Applications are processed on time.	3.99
Brochures and forms are clear and easy to understand.	4.01
Advertised promises are consistent with its performance.	3.94
Business transactions are accurate.	4.14
Customers problem are promptly solved.	3.97
Employees are neat-appearing.	4.00
Employees insist on error-free records.	4.03
Employees give customers prompt service.	3.89

Customers are told when services will be performed.	3.88
Employees are willing to help their customer.	3.99
Employees are never too busy to respond to customers requests.	3.90
Employees give customers personal attention.	3.76
Employees understand the specific needs of their customers.	3.93
Employees are courteous with customers.	4.06
Employees have the knowledge to answer customers' questions.	4.01
Employees' behaviour instills confidence in customers	3.98
Customers feel safe in their transaction.	4.08
Give their customers individual attention.	3.84
Have their customer's best interest at heart.	3.99
<b>Average mean</b>	<b>3.97</b>

The study also extended the factor analysis for the Islamic banks and conventional banks separately. The same exercise was repeated for both banks to locate whether there was a different result in terms of new generated dimensions for the expectation and perception of service quality for the Islamic and conventional banks.

#### ***Factor Analysis for the Islamic banks in Malaysia***

The outcome of the KMO measure for all 29 items combined, related to the expectation and perception of service quality of Islamic bank, produced a value of 0.968 and 0.977 respectively. Hence, due to the appropriate sample size, the factor analysis was considered suitable to be carried out.

Based on the suggested outcomes from the Principal Component Analysis (the table of the result is attached in the Appendix), it was decided to retain 4 components for expectation of service quality and 2 components for perception of service quality of the Islamic banks. The result was quite similar to the result of the factor analysis for Malaysian banks in general (combination of the Islamic and conventional banks). The new generated components for expectation of service quality of the Islamic banks are:

- *Operational Services;*
- *Social and Islamic Values;*
- *Internal Services; and*
- *Appearances.*

On the other hand, the new generated components for perception of service quality of Islamic banks are:

- *Operational and Internal Services; and*
- *Social and Islamic Values.*

The result indicated that there were no significant differences were found in terms of the new empirically generated dimensions between the Islamic banks and the Malaysian banks (combination of Islamic and conventional banks). Thus, these dimensions constituted the most important dimensions as expected and perceived by the respondents of the Islamic banks and the Malaysian banks in general.

### ***Factor Analysis for Conventional banks in Malaysia***

The same procedure was followed for the conventional banks in Malaysia. The outcome of the KMO measure for all 23 items combined, related to the expectation and perception of service quality of conventional bank, produced a value of 0.955 and 0.973 respectively. The Bartlett's test of Sphericity recorded a statistical significance of 0.000, which supported the factorability of the correlation matrix. Thus, the result showed that factor analysis was appropriate for the study.

The result from the Principal Component Analysis (the table of the result was also attached in the Appendix) showed that the 23 items were simply reclassified to 3 components for the expectation of service quality and 2 components for the perception of service quality of the conventional banks. It should be noted here that 6 items were excluded from this analysis as these items were only related to Islamic banks. As a result, the new generated components for expectation of service quality of the conventional banks are:

- *Operational Services;*
- *Social and Internal Services; and*
- *Appearances.*

On the contrary, the new generated components for perception of service quality of conventional banks are:

- *Social and Internal Services; and*
- *Appearances and Operational Service.*

The result for the factor analysis of the conventional banks indicated significant differences were found in terms of the new empirically generated dimensions between the conventional banks and the Malaysian banks (combination of the Islamic and conventional banks). In general, being a conventional bank in nature, there are no Islamic values dimension generated as the new dimension.

Additionally, the result for the expectation of service quality of conventional banks produced almost similar dimensions as in the expectation of service quality of the Islamic banks except that the former did not have Islamic Values as one of their dimensions. The remaining 3 dimensions for the conventional banks, *i.e.* ‘Operational Services’, ‘Social and Internal Services’, and ‘Appearances’, had almost the same variables as in the expectation of service quality of the Islamic banks.

On the contrary, the analysis from the perception of service quality of conventional banks not only had reduced the number of the dimensions to 2 dimensions, but the analysis also extracted a complete new variance of dimensions. It can be concluded that these 2 dimensions represented the most imperative dimensions perceived by the respondents of the conventional banks.

## **8.6 SUMMARY**

The objective of this chapter is to gauge the level of awareness and knowledge of the respondents regarding the products and services offered by banks in Malaysia. The study is further broken down into several strands, namely ‘awareness and knowledge on products and services of Islamic banks’, and ‘awareness and knowledge on products and services of conventional banks’. In addition, this study also endeavors to determine the patronage factors influencing the customers to open an account with a bank; and to investigate whether there is any relationship between the SERVQUAL dimensions with the respondents’ profiles of the sampled banks.

The findings from the analysis suggest that groups of respondents, which are well exposed to the Islamic banking products and services, *i.e.* male, customers of stand-alone Islamic bank, customers of foreign-owned Islamic bank, middle income earner (RM 3,001 to RM 5,000), aged between 31 to 40 years old, higher levels of education

(postgraduate), and had a longer duration of banking relationship (more than 5 years), have better awareness and knowledge of products and services offered by the Islamic banks.

On the other hand, the findings from customers of the conventional banks suggest that groups of respondents *i.e.* male, aged between 21 to 30 and 41 to 50 years old, middle income earner (RM 1,001 to RM 3,000), higher level of education (other qualification), customers of locally-owned conventional bank, and had shorter duration of banking relationship (1 to 3 year), have better level of awareness and knowledge of products and services offered by the conventional banks.

The research was further extended in order to determine the major factors that influence the customers to open an account with their bank. The findings suggest that there are three major factors, *i.e.* ‘Service Oriented Factor’, ‘Financial Oriented Factor’, and ‘Marketing Oriented Factor’. Based on the ranking, it turns out that ‘Service Oriented Factor’ was ranked first according to the highest mean value.

Another variable which is ‘Religious Obligation’ was also added as one of the patronage factor of the Islamic bank. However, it should be noted that this question was directed exclusively for the respondents of the Islamic banks only. The results indicate that there was a significant difference in the statistical results believing that the ‘Religious Obligation’ was an important aspect for the respondents from the ‘education level’ and ‘relationship duration’ categories.

Additionally, this study expanded the gap analysis (perception minus expectation) not only for the Islamic banks in Malaysia, but also the conventional banks. A combination of Islamic and conventional banks’ gap analysis was also done in order to know the gap of service quality in Malaysian banking in general. It should be noted that from the result of the survey, both banks *i.e.* the Islamic and conventional banks; have negative gap values (perception minus expectation) for all of the items. This demonstrated that the performance of both banks was below expectations and indicated a low service quality. The results were in harmony with the gap analysis of service quality for the Malaysian banks in general (combination of the Islamic and conventional banks), which also had negative gap values for all items.

The chapter also presented the factor analysis to locate the newly generated structures and constructs of the dimensions from the expectations and perceptions of the respondents. It can be concluded that for the expectation of service quality for Malaysian banks in general (combination of the Islamic and conventional banks), the new empirically generated dimensions had 4 components; while the perception of service quality had 2 components. The new components for expectation of service quality of the Malaysian banks are: '*Operational Services*', '*Social and Islamic Values*', '*Internal Services*', and '*Appearances*'. On the other hand, the new generated components for perception of service quality of Malaysian banks are: '*Operational and Internal Services*', and '*Social and Islamic Values*'.

After presenting the empirical findings of the study, the next chapter aims to contextualise these findings and test the research hypotheses.



## **Chapter 8**

### **Searching for the Impact of Service Quality Dimensions on Customer Satisfaction: A Regression Analysis**

#### **8.1 INTRODUCTION**

This chapter is a continuation of the last chapter, which explored the customers' satisfaction. The aim of this chapter is to analyse the customers' satisfactions towards the services provided by the Islamic commercial banks using Stepwise Regression Analysis.

In addition, the analysis is meant to determine which dimension of service quality that had a relationship with customers' satisfaction by predicting the level of connection between the independent variables and the dependent variable *i.e.* 'Customers' satisfaction'.

The chapter is divided into seven parts. Following the first part of introduction (Section 8.1) is Section 8.2, which concentrates on the regression analysis for customers' satisfaction. Section 8.3 focuses on regression analysis for the expectation based service quality, while Section 8.4 presents the regression analysis for the perception based service quality. The study is further divided into regression analysis based on the types of banks. Section 8.5 concentrates on regression analysis for Islamic banks, while Section 8.6 focuses on regression analysis for conventional banks. This chapter concludes with a brief summary of the overall analysis and findings in Section 8.7.

#### **8.2 REGRESSION ANALYSIS FOR CUSTOMERS' SATISFACTION**

Customer satisfaction has been an imperative topic since the mid-1990s. From a service point of view, customers' satisfaction is about monitoring the quality of delivery of the service, thus measuring how well the organization is delivering the service (Fonseca, 2009:353). Consequently, for many years, service quality and marketing researchers have focused on strategies to maintain existing customers'

satisfaction. Therefore, it is essential to identify a suitable approach to provide a solid and justifiable explanation of customers' satisfaction behaviour that shapes customers selection of the service provider especially in the banking industry.

Regression analysis is used to analyse factors in situations where the aim is to predict one variable on the basis of several independent factors. It is also used to explore the relationship between the continuous dependent variable and a number of independent variables (Pallant, 2007:146). In this study, seven independent variables were determined: 'Islamic Values', 'Assurance', 'Responsiveness', 'Tangible', 'Empathy', 'Reliability' and 'Social Responsibility'. On the other hand, the dependent factor was the 'Customers' Satisfaction'. These factors were used to explain the extent to which customers' satisfaction are measured, predicted, and explained.

There are a number of different types of multiple regression analyses that can be used, depending on the nature of the question that are to be addressed (Pallant, 2007:147). In addition, in the process of using a regression analysis, there are different ways in which a researcher can check the relative contribution of each independent variable to the relationship with the dependent variable such as forward, backward, simultaneous, hierarchical, and stepwise selection. Therefore, in the regression analysis process, there are multiple selections by which all variables have been entered into the model in a specific order that reflects the theoretical considerations with respect to the previous studies and findings.

Moreover, with respect to the nature of the dependent variable, the study applied the Stepwise Regression Analysis to predict the level of connection between the independent variables and the dependent variable *i.e.* 'Customers' Satisfaction'. Before explaining the main regression measures, it is helpful to interpret the regression equation.

### ***Regression Equation***

The following regression model is formulated by taking the service quality dimensions as independent variables to explain the customers' satisfaction, namely the dependent variable:

$$S = \alpha \pm \beta_1 IV \pm \beta_2 AS \pm \beta_3 RES \pm \beta_4 TAN \pm \beta_5 EMP \pm \beta_6 REL \pm \beta_7 SOC + e$$

where:

*S*: Customers' Satisfaction; *IV*: Islamic Values; *AS*: Assurance; *RES*: Responsiveness; *TAN*: Tangible; *EMP*: Empathy; *REL*: Reliability; *SOC*: Social Responsibility; *e*: Error term;  $\alpha$ : constant.

Based on the regression equation, customers' satisfaction is a function of service quality dimensions. In other words, satisfaction is based on the relationship magnitude, which implies that satisfaction is a result of the acceptable level of behaviour consequences that satisfy the customer in terms of quality of the service received. Behaviour consequences will determine the customers' satisfaction from the service quality provided by the banks. Thus, customers' satisfaction in this study was measured or predicted by explaining customers' satisfaction relationship with the service quality dimensions.

### **8.3 REGRESSION ANALYSIS FOR THE EXPECTATION BASED SERVICE QUALITY FOR MALAYSIAN BANKS**

This study, as identified, aims to measure customers' satisfaction through the primary data by employing the Stepwise Regression Analysis. Table 8.1 provides the model summary; as can be seen, the adjusted *R*-square or the coefficient of determination is very close to perfect model with about 97.1% for the First Model; and 97.4% for the Second Model. Thus, the models presented in this study explain about 97% of the variation observed, which is highly satisfactory.

**Table 8.1: Model Summary of the Regression Analysis for Expectation of Service Quality for Malaysian Banks**

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1	.985	.971	.971	.676
2	.987	.974	.974	.645

The results of the adjusted *R*-Square are verified by the results produced by ANOVA which is depicted in Table 8.2; as dividing the regression sum of squares to total sum of squares, the same adjusted *R* results could be achieved.

**Table 8.2: ANOVA for the Expectation of Service Quality for Malaysian Banks**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14375.036	1	14375.036	31500.414	.000
	Residual	428.964	940	.456		
	Total	14804.000	941			
2	Regression	14413.294	2	7206.647	17320.030	.000
	Residual	390.706	939	.416		
	Total	14804.000	941			
Dependent Variable: Satisfied with SQ						

Table 8.2 also indicates that ANOVA analysis produced highly significant results, as both the models were fully significant.

**Table 8.3: Regression Coefficient for the Expectation of Service Quality for Malaysian Banks**

Model		Unstandardized Coefficients		Standardized Coefficients	t-Value	Sig. P-Value
		B	Std. Error	Beta		
1	Expectation Tangible	.962	.005	.985	177.484	.000
2	Expectation Tangible	.658	.032	.674	20.513	.000
	Expectation Reliability	.268	.028	.315	9.589	.000

Table 8.3 provides the coefficient estimates for the models mentioned through the path analysis by using the Stepwise Regression method. As can be seen, two models that had positive direct effect on customers' satisfaction were produced. The First

Model for the expectation of service quality for Malaysian banks had only one dimension, ‘Tangible’ with a coefficient value of 98.5 and p-value of 0.000, which was a fully significant value. The remaining six dimensions, namely ‘Assurance’, ‘Responsibility’, ‘Empathy’, ‘Reliability’, ‘Islamic Values’, and ‘Social Responsibility’, were not significant based on the result of the analysis.

On the other hand, the Second Model had two dimensions, namely ‘Tangible’ and ‘Reliability’. The coefficient values for the Second Model were 67.4 and 31.5 for ‘Tangible’ and ‘Reliability’ respectively. In addition, both of the dimensions in the Second Model also had a fully significant value (p-value = 0.000). According to the Second Model, only two dimensions had a positive direct effect on customers’ satisfaction, while the remaining five dimensions *i.e.* ‘Assurance’, ‘Responsibility’, ‘Empathy’, ‘Islamic Values’, and ‘Social Responsibility’, were not significant.

In sum, with the data based on the expectations of individuals sampled on service quality, it seems that only ‘Tangible’ and ‘Reliability’ dimensions were essential for customers’ satisfaction.

#### **8.4 REGRESSION ANALYSIS FOR THE PERCEPTION BASED SERVICE QUALITY FOR MALAYSIAN BANKS**

After establishing the regression analysis for the expectation of service quality for the Malaysian banks, the next step was to conduct the regression analysis for the perception of service quality for these banks in order to assess the effect of the independent variables (the seven modified SERVQUAL dimensions) on customers’ satisfaction. Table 8.4 illustrates the model summary of the regression analysis for perception of service quality for these banks.

**Table 8.4: Model Summary of the Regression for Perception of Service Quality for Malaysian Banks**

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1	.985	.971	.971	.676
2	.986	.973	.972	.658
3	.986	.973	.973	.653

Table 8.4 provides the model summary; as can be seen, the adjusted *R*-square or the coefficient of determination was very close to perfect model with about 97.1% for the First Model; 97.2% for the Second Model; and 97.3% for the Third Model. Hence, all the models presented in the regression for the perception of service quality explained about 97% of the variation observed, which was highly acceptable.

**Table 8.5: ANOVA for the Perception of Service Quality for Malaysian Banks**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14375.036	1	14375.036	31500.414	.000
	Residual	428.964	940	.456		
	Total	14804.000	941			
2	Regression	14397.289	2	7198.644	16619.967	.000
	Residual	406.711	939	.433		
	Total	14804.000	941			
3	Regression	14403.969	3	4801.323	11258.236	.000
	Residual	400.031	938	.426		
	Total	14804.000	941			

Dependent Variable: Customers' Satisfaction with SQ

Table 8.5 also indicates that ANOVA analysis produced highly significant results, as all the three models were fully significant.

**Table 8.6: Regression Coefficient for the Perception of Service Quality for Malaysian Banks**

Model		Unstandardized Coefficients		Standardized Coefficients	t-Value	Sig. P-Value
		B	Std. Error	Beta		
1	Perception Tangible	.962	.005	.985	177.484	.000
2	Perception Tangible	.656	.043	.672	15.230	.000
	Perception Assurance	.306	.043	.316	7.168	.000
3	Perception Tangible	.607	.044	.622	13.659	.000
	Perception Assurance	.211	.049	.218	4.345	.000
	Perception Social	.146	.037	.149	3.958	.000

As indicated in Table 8.6, the Stepwise Regression Analysis for the perception of service quality for these banks produced three models that were significant and had a direct effect on customers' satisfaction. All the models had a fully significant value of

0.000. The First Model consisted of one dimension, namely 'Tangible' with a coefficient value of 98.5 and p-value of 0.000, which was a fully significant value. The remaining six dimensions, namely 'Assurance', 'Responsibility', 'Empathy', 'Reliability', 'Islamic Values', and 'Social Responsibility', were not significant.

Furthermore, based on the analysis, the Second Model had two dimensions that had a positive direct effect on customers' satisfaction, namely 'Tangible' and 'Assurance'. The coefficient values were 67.2 and 31.6 for 'Tangible' and 'Assurance' respectively. In addition, both of the dimensions in the Second Model also had a fully significant value (p-value = 0.000), while the remaining five dimensions *i.e.* 'Tangible', 'Responsibility', 'Empathy', 'Islamic Values', and 'Social Responsibility', were insignificant.

On the other hand, the Third Model had three dimensions that had a positive direct effect on customers' satisfaction, namely 'Tangible', 'Assurance', and 'Social Responsibility'. The coefficient values for the Third Model were 62.2, 21.8 and 14.9 for 'Tangible', 'Assurance', and 'Social Responsibility' respectively. All of the three dimensions in the Third Model also had a fully significant value (p-value = 0.000), while the remaining four dimensions *i.e.* 'Responsibility', 'Empathy', 'Islamic Values', and 'Reliability', were not important.

The study also extended the regression analysis for Islamic banks and conventional banks separately. The same exercise was repeated for both banks to examine whether there was a different result in terms of dimension that had a direct effect on customers' satisfaction for the expectation and perception of service quality.

## 8.5 REGRESSION ANALYSIS FOR ISLAMIC BANKS: EXPECTATION AND PERCEPTION

**Table 8.7: Model Summary of the Regression for Expectation of Service Quality for Islamic Banks**

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1	.983	.965	.965	.734
2	.984	.968	.968	.704

**Table 8.8: Model Summary of the Regression for Perception of Service Quality for Islamic Banks**

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1	.983	.966	.966	.729
2	.984	.969	.969	.700
3	.985	.970	.970	.687

Table 8.7 and 8.8 provide the model summary; as can be seen, the adjusted *R*-square or the coefficient of determination was very close to perfect model with about 96.5% for the First Model; and 96.8% for the Second Model under the expectation category. On the other hand, the adjusted *R*-square or the coefficient of determination for the perception category was 96.6% for the First Model; 96.9% for the Second Model; and 97.0% for the Third Model. Hence, the models presented in this study explain about 96% of the variation observed, which was highly acceptable.

**Table 8.9: ANOVA for the Expectation of Service Quality for Islamic Banks**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7332.888	1	7332.888	13596.424	.000
	Residual	262.112	486	.539		
	Total	7595.000b	487			
2	Regression	7354.332	2	3677.166	7410.324	.000
	Residual	240.668	485	.496		
	Total	7595.000b	487			

**Table 8.10: ANOVA for the Perception of Service Quality for Islamic Banks**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7336.771	1	7336.771	13808.147	.000
	Residual	258.229	486	.531		
	Total	7595.000	487			
2	Regression	7357.469	2	3678.735	7511.388	.000
	Residual	237.531	485	.490		
	Total	7595.000	487			
3	Regression	7366.460	3	2455.487	5200.214	.000
	Residual	228.540	484	.472		
	Total	7595.000	487			



Table 8.9 and 8.10 also indicate that ANOVA analysis for the expectation and the perception of conventional banks produced highly significant results, as all the models under the expectation and the perception category were fully significant.

**Table 8.11: Regression Coefficient for the Expectation of Service Quality for Islamic Banks**

Model		Unstandardized Coefficients		Standardized Coefficients	t-Value	Sig. P-Value
		B	Std. Error	Beta		
1	Expectation Tangible	.958	.008	.983	116.604	.000
2	Expectation Tangible	.659	.046	.676	14.294	.000
	Expectation Islamic	.268	.041	.311	6.574	.000

**Table 8.12: Regression Coefficient for the Perception of Service Quality for Islamic Banks**

Model		Unstandardized Coefficients		Standardized Coefficients	t-Value	Sig. P-Value
		B	Std. Error	Beta		
1	Perception Empathy	.979	.008	.983	117.508	.000
2	Perception Empathy	.512	.072	.514	7.085	.000
	Perception Tangible	.460	.071	.472	6.501	.000
3	Perception Empathy	.323	.083	.324	3.886	.000
	Perception Tangible	.341	.075	.350	4.571	.000
	Perception Islamic	.304	.070	.313	4.364	.000

As indicated by the Stepwise Regression Analysis for the Islamic banks, the result produced two models for the expectation and three models for the perception that were significant and had a direct effect on customers' satisfaction. Nevertheless, there were significant difference between the expectation and the perception models. In addition, all the models had a fully significant value of 0.000.

As for the expectation of service quality for the Islamic banks, the First Model comprised of one dimension, namely 'Tangible' dimension with a coefficient value of 98.3. While the remaining six dimensions, 'Assurance', 'Responsibility', 'Empathy', 'Reliability', 'Islamic Values', and 'Social Responsibility', were excluded from the First Model because they were not significant.

Furthermore, the Second Model under the expectation of service quality of the Islamic banks, 'Tangible' and 'Islamic Values' had a positive direct effect on

customers' satisfaction. The coefficient values were 67.6 and 31.1 for 'Tangible' and 'Islamic Values' respectively. The remaining five dimensions *i.e.* 'Responsibility', 'Empathy', 'Islamic Values', 'Reliability' and 'Social Responsibility', were not significant, hence excluded from the model.

As for the perception of service quality for the Islamic banks, the First Model contained of 'Empathy' dimension with a coefficient value of 98.3. The remaining six dimensions, namely 'Assurance', 'Responsibility', 'Tangible', 'Reliability', 'Islamic Values', and 'Social Responsibility', were excluded from the First Model because they were not significant.

The Second Model for the perception of service quality of the Islamic banks comprised of two dimensions, 'Empathy' and 'Tangible'. The coefficient values were 51.4 and 47.2 for 'Empathy' and 'Tangible' respectively. The remaining five dimensions *i.e.* 'Responsibility', 'Assurance', 'Islamic Values', 'Reliability' and 'Social Responsibility', were excluded from the model because they were not significant.

The Third Model for the perception of service quality of the Islamic banks contained three dimensions, 'Empathy', 'Tangible', and 'Islamic Values'. The coefficient values were 32.4 (Empathy), 35.0 (Tangible), and 31.3 (Islamic Values). The remaining four dimensions *i.e.* 'Responsibility', 'Assurance', 'Reliability' and 'Social Responsibility', were excluded from the model because they were not significant.

## **8.6 REGRESSION ANALYSIS FOR CONVENTIONAL BANKS: EXPECTATION AND PERCEPTION**

After establishing the regression analysis for the expectation and the perception of service quality for Islamic banks, the subsequently step was to establish the regression analysis for the expectation and the perception of service quality for conventional banks in order to assess the effect of the independent variables (the seven modified SERVQUAL dimensions) on customers' satisfaction from the conventional banks category.

**Table 8.13: Model Summary of the Regression for Expectation of Service Quality for Conventional Banks**

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1	.988	.977	.977	.606
2	.990	.980	.980	.564

**Table 8.14: Model Summary of the Regression for Perception of Service Quality for Conventional Banks**

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1	.988	.977	.977	.606
2	.989	.978	.978	.596

Table 8.13 and 8.14 provide the model summary; as can be seen, the adjusted *R*-square or the coefficient of determination was very close to perfect model with about 97.7% for the First Model; and 98% for the Second Model for the expectation category. On the other hand, the adjusted *R*-square or the coefficient of determination for the perception category was 97.7% for the First Model; and 97.8% for the Second Model. Thus, the models presented in this study explained about 97% of the variation observed, which was highly satisfactory.

**Table 8.15: ANOVA for the Expectation of Service Quality for Conventional Banks**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7042.438	1	7042.438	19153.317	.000
	Residual	166.562	453	.368		
	Total	7209.000	454			
2	Regression	7065.473	2	3532.736	11125.395	.000
	Residual	143.527	452	.318		
	Total	7209.000	454			

**Table 8.16: ANOVA for the Perception of Service Quality for Conventional Banks**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7042.438	1	7042.438	19153.317	.000
	Residual	166.562	453	.368		
	Total	7209.000	454			
2	Regression	7048.541	2	3524.270	9927.562	.000
	Residual	160.459	452	.355		
	Total	7209.000	454			

Table 8.15 and 8.16 also indicate that the ANOVA analysis for the expectation and the perception of conventional banks produced highly significant results, as both the models for expectation and perception were fully significant.

**Table 8.17: Regression Coefficient for the Expectation of Service Quality for Conventional Banks**

Model		Unstandardized Coefficients		Standardized Coefficients	t-Value	Sig. P-Value
		B	Std. Error	Beta		
1	Expectation Tangible	.966	.007	.988	138.396	.000
2	Expectation Tangible	.610	.042	.624	14.434	.000
	Expectation Assurance	.316	.037	.368	8.517	.000

**Table 8.18: Regression Coefficient for the Perception of Service Quality for Conventional Banks**

Model		Unstandardized Coefficients		Standardized Coefficients	t-Value	Sig. P-Value
		B	Std. Error	Beta		
1	Perception Tangible	.966	.007	.988	138.396	.000
2	Perception Tangible	.751	.052	.768	14.343	.000
	Perception Assurance	.216	.052	.222	4.146	.000

Based on the Stepwise Regression Analysis, the results for both the expectation and the perception of service quality (refer to Table 8.17 and 8.18) produced two models that were significant and had a direct effect on customers' satisfaction. There were no significant differences between the expectation and the perception models. In addition, all the models achieved a complete significant value of 0.000. The First Model only contained 'Tangible' dimension, with a coefficient value of 98.8 for both categories, the expectation and the perception. The remaining five dimensions, 'Assurance', 'Responsibility', 'Empathy', 'Reliability', and 'Social Responsibility', were not significant, hence were excluded from the First Model.

On the other hand, the Second Model for both categories had two similar dimensions, 'Tangible' and 'Assurance'. The coefficient value for the 'Tangible' dimension was 62.4 and 76.8 for the expectation and the perception respectively. The 'Assurance' dimension however, had the coefficient value of 36.8 (expectation) and 22.2

(perception). The remaining four dimensions, 'Responsibility', 'Empathy', 'Reliability', and 'Social Responsibility', were not significant, thus, were excluded from the Second Model.

## **8.7 SUMMARY**

This research offers practical help to researchers and practitioners in providing a direction for customers' satisfaction through service quality improvement especially for Islamic banks due to the change in the cultural and country contexts.

The finding from the Multiple Regression Analysis shows that for expectation based service quality, the dimensions that had direct effect to the customers' satisfaction is 'Tangible' and 'Islamic Values'. While for the perception based service quality, the dimensions that had direct effect to customers' satisfaction were 'Empathy', 'Tangible' and 'Islamic Values'. It should be noted that 'Tangible' dimensions were the most crucial dimension that had a relationship with customers' satisfaction.

The assessment of Islamic and conventional banks' service quality was essential for all parties. In an aggressive and competitive financial market, their service quality and performance will be the imperative indicator used by depositors, investors, bank managers and regulators. This indicator will give direction for the bank managers whether to enhance their deposit service or loan service or both to improve its finance. Equally, regulators are also interested to know the level of the service quality management for their regulation purposes (Samad and Hassan, 1999).

After presenting the empirical findings of the study, the next chapter aims to contextualise these findings and test the research hypotheses.

## **Chapter 9**

### **Contextualising the Findings: An Interpretative Discussion**

#### **9.1 INTRODUCTION**

This chapter aims to contextualise the findings from the two sources of analysis methods, the literature review and the quantitative or the empirical analysis. The literature review discussed in Chapter 2 explores service quality in general and past studies related to service quality in banking industry. Chapter 3 discusses the literature pertaining to the service quality management in Islamic banking and empirical results on service quality in Islamic banks industry. In addition, as presented in Chapter 4, given the fact that the Islamic banking in Malaysia has been operating more than 29 years now, it is crucial to rationalises the study of expectations and perceptions of the customers towards the service quality offered by the Islamic banks in Malaysia. Collectively, the literature review provides the theoretical foundation and the necessary input from which this study has evolved. It should, however, be noted that the available studies on similar subject matter, which are mostly empirical in nature (primary and secondary data research), only consider the perception of the customers or only examine one type of bank (either Islamic or conventional). The findings of this study will therefore fill a significant gap in current scholarship by providing vital information both on expectations and perception of customers on service quality in Islamic and conventional banks in Malaysia. Based on the review of the relevant literature, to the best of the researcher's knowledge, no other piece of academic research has attempted to study this topic in detail.

In providing empirical evidence, the last three chapters (Chapters 6, 7 and 8) examine the knowledge, awareness, opinions, expectations and perceptions of the customers regarding the service quality of Malaysian banks (Islamic banks and conventional banks) through quantitative analysis. The quantitative analysis presented in Chapter 6 attempts to identify the nature and characteristic of the respondents through different statistical methods. The analysis and findings out of the data are presented in detail in this chapter. Chapter 7 presents findings from various inferential statistical analysis methods employed in order to explore the customers' expectations and perceptions of

Malaysian bank's service quality, while Chapter 8 presents the results of the regression analysis on customers' satisfaction through the service quality dimensions.

As this study adopts the *methodological triangulation technique* of data analysis, the findings from the two different methods of analysis (literature review and quantitative analysis) in this chapter are discussed and interpreted in an integrated manner to provide further meaning to the results. This allows the findings to be considered and linked together to make further meaning from the results. In addition, the discussion presented in this chapter aims to compare the results of this study through the cross referencing with the literature review and quantitative analysis whereby the findings of this study are validated. This enables in-depth analysis and credible inferences to be made. This chapter is organised as follows: Section 9.2 presents a discussion on 'knowledge and awareness of banking products and services'; Section 9.3 presents a discussion on 'banking selection criteria'; Section 9.4 develops a discussion on 'customers expectation and perception on the dimensions of service quality of banks'; Section 9.5 presents a discussion on the findings generated from 'regression analysis on customers' satisfaction'; and finally Section 9.6 provides a summary and conclusion.

## **9.2 REFLECTING ON THE FINDINGS RELATED TO KNOWLEDGE AND AWARENESS ON BANKING PRODUCTS AND SERVICES**

This research intends to examine, to a certain extent, the basic relevant knowledge of bank customers relating to *Shari'ah* concepts, which is vital and makes Islamic banking unique and different from the conventional counterpart. Given the fact that Malaysia has a dual banking system, Islamic banks operates alongside the conventional ones. In responding to this reality, this study aimed to gauge the customers' perceptions and general understanding of Islamic banking in which Islamic banks' customers are asked about their familiarity with each of the financial product listed, as formulised in the Hypothesis 1:

***Hypothesis 1: The majority of Malaysian Islamic banks' customers do have a fair level of familiarity with products and services of Islamic banks.***

The analysis results in relation to Hypothesis 1 are presented in Table 6.11 in Chapter 6 in the form of frequency and percentage distribution on customers' awareness and

knowledge of products and services of Islamic banks. The results show that the respondents' awareness and knowledge about Islamic banking products and services are still low. From the total of 20 types of products and services, only 3 products or services are well-known by about 60% of the participants. The remaining 17 products and services scored less than 41%. This result revealed that most of the respondents have less knowledge and awareness of most of the Islamic banking products and services available apart from the most popularly known products. Therefore, the null hypothesis that stated the majority of Malaysian Islamic banks' customers do have a fair level of familiarity with products and services of Islamic banks can be rejected.

These results are supported the other studies such as Khattak and Rehman (2010), Bley and Kuehn (2004) and Gerrard and Cunningham (1997). Khattak and Rehman's (2010) study for Pakistan showed that the customers had no knowledge about the specific Islamic products such as *murabahah*, *ijarah* or *musharakah* financing. While Gerrard and Cunningham's 1997 study in Singapore, mostly a non-Muslim country, concluded that most of the Muslims were aware of the fundamental concepts of the Islamic finance. However, they were not aware of the specific Islamic financial products such as *murabahah*, *ijarah* and *etc.*

It is argued that the lack of knowledge of specific Islamic products is in part attributable to the Arabic vocabulary used to identify Islamic financial products, as Bley and Kuehn (2004) asserted that as most of the world is not even minimally fluent in Arabic, which is a valid assertion for the Muslim world as well. Hence, it can be argued that the use of Arabic obstructs the understanding of what these Islamic products really are. Add to this the relative newness of the products provided, the market is generally unaware of these products even though a great effort have been put forward by the Malaysian government and its agencies, such as Bank Negara Malaysia, the Security Commission, and other interested parties, in promoting Islamic banking and finance in Malaysia. However, the results indicate that immediate steps needed to be taken to bridge the gap on the customers' knowledge of products and services offered by the banks.

After this initial result, further analysis was carried out to determine whether there is any significant difference in terms of the knowledge and awareness level of the customers through various categories. For this, the following sub-hypotheses were



formulated. In responding to these hypotheses, the Mann-Whitney U-test and Kruskal-Wallis test were employed and the results are presented in Table 7.1 to Table 7.8 in Section 7.2.1 (Chapter 7), while Table 9.1 depicts the summary of the results.

**Table 9.1: Kruskal-Wallis and Mann-Whitney U Tests for Knowledge and Awareness of Products and Services offered by Malaysian Banks**

Control Variables	Result for Islamic Banks	Result for Conventional Banks
Gender	Male	Male
Age	31 to 40	21 to 30 and 41 to 50
Income level	RM3,001 to RM5,000	RM1,001 to RM3,000
Education level	Postgraduate	Other qualification
Relationship duration	More than 5 years	1 to 3 year
Type of ownership	Foreign-owned	Locally-owned
Islamic bank type	Stand-alone Islamic bank	-

*H<sub>1-1</sub>: There are no statistically significant differences between different gender groups in the level of familiarity with products and services of Islamic banks.*

Table 7.1 in Chapter 7 specified that 4 out of 14 products and services that showed a significant difference between male and female categories had full significance level of 0.000. The mean score from the result shows that the male respondents possessed more knowledge and awareness about the products and services offered by the Islamic banks. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, since statistically there was a significant difference between different both gender group in the level of familiarity with products and services of Islamic banks.

*H<sub>1-2</sub>: There are no statistically significant differences across various age groups in the level of familiarity with products and services of Islamic banks.*

Similarly, the results in Table 7.4 in Chapter 7 indicated that there is statistically a significant difference across various age groups in terms of the level of familiarity with products and services of Islamic banks. In the case of 9 out of 10 products and

services, significant differences are established across five different age groups indicating that respondents aged between 31 to 40 years old had better level of knowledge and awareness about Islamic banking products and services. Accordingly, the null hypothesis is rejected and the alternative hypothesis is accepted.

*H<sub>1-3</sub>: There are no statistically significant differences across various income level groups in the level of familiarity with products and services of Islamic banks.*

Table 7.5 in Chapter 7 also shows that there is statistically a significant difference across various income level groups in the level of familiarity with products and services of Islamic banks. Based on the mean value scores, the respondents with monthly income between RM 3,001 to RM 5,000 had better level of knowledge and awareness. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted.

*H<sub>1-4</sub>: There are no statistically significant differences across various educational backgrounds and qualification profile groups in the level of familiarity with products and services of Islamic banks.*

Similar result can be derived from this category analysis, for which the statistical result does not support the null hypothesis. Table 7.6 in Chapter 7 shows that there is statistically a significant difference across various educational backgrounds groups in the level of familiarity with products and services of Islamic banks. Established from the mean-value score, respondents that possessed better academic qualification (postgraduate) had better level of knowledge and awareness of the Islamic banking products and services. Hence, the null hypothesis is rejected and the alternative hypothesis is accepted.

*H<sub>1-5</sub>: There are no statistically significant differences between customers of stand-alone Islamic banks and Islamic subsidiaries in the level of familiarity with products and services of Islamic banks.*

As for this category, the result in Table 7.2, in Chapter 7 also indicates that there is statistically a significant difference between customers of stand-alone Islamic banks

and Islamic subsidiaries in the level of familiarity with products and services of Islamic banks. The mean rank showed that the respondents of stand-alone Islamic banks have more knowledge and awareness of the products offered by Islamic banks. Consequently, the null hypothesis is rejected and the alternative hypothesis is accepted.

*H<sub>1-6</sub>: There are no statistically significant differences between customers of local-owned and foreign-owned Islamic banks in the level of familiarity with products and services Islamic banks.*

Nearly similar results can be seen in this category, where the results in Table 7.3 (in Chapter 7) depicts that there is statistically a significant difference between customers of local-owned and foreign-owned Islamic banks in the level of familiarity with products and services of Islamic banks. The results implied that respondents of foreign-owned Islamic banks had more knowledge and awareness of the products and services offered by the Islamic banks than the local-owned ones. Hence, the null hypothesis is rejected and the alternative hypothesis is accepted.

*H<sub>1-7</sub>: There are no statistically significant differences across various groups with different durations of banking relationships in the level of familiarity with products and services of Islamic banks.*

In this category, the result in Table 7.7 (Chapter 7) also reveals that there is statistically a significant difference across various groups with different durations of banking relationship in the level of familiarity with products and services of Islamic banks. Based on mean-value scores on the products and services, respondents who had longer relationship duration (more than 5 years) with Islamic banks have better knowledge and awareness. For that reason, the null hypothesis is rejected and the alternative hypothesis is accepted.

In brief, as discussed in Section 7.2.1 (Chapter 7), all control variable categories, namely 'gender', 'age', 'income level', 'educational background', 'type of ownership', 'relationship duration' and 'Islamic bank type' achieved the level of statistical significance, which suggested that there were significant mean differences

in terms of awareness concerning the products and services across various groups in each category. The results identified that male respondents, aged between 31-40 years old, earning RM 3,001-RM 5,000 monthly, respondents from a higher level of education background (postgraduate), respondents of foreign-owned Islamic bank, respondents from stand-alone Islamic bank and those with a longer period of banking relationship (more than 5 years), had better knowledge and awareness of products and services offered by the Islamic banks.

Consequently, the lack of knowledge of Islamic banking products and services has been one area of concern in the literature for quite some time. This is also triggered by the number of Islamic banking terms that has been increasing over this period. However, in spite of the escalating concern in the area of awareness of Islamic banking (Haron *et al.* 1994) and the growing interest in the use of Islamic banks in Malaysia, no general or formal educational initiatives have been initiated at public level in terms of financial awareness by either Malaysian government or the financial institutions to address this lack of basic product knowledge. Today, the emphasis seems to be on offering Islamic finance courses at college/university or continuing education levels. It needs to be offered earlier, at the high school levels.

On the contrary, conventional banking products were covered in the syllabus of most high school and tertiary education (Bley and Kuehn, 2004). This is the case of Malaysia as well, where the conventional banking and finance was introduced as one of the subject in the high school but not Islamic banking. This is because conventional finance and capital markets are older, more developed and efficient vis-à-vis Islamic finance. It need a collaboration from many agencies to include Islamic finance in the syllabus of the high school, such as the approval from the government, ministry of education, schools' teacher, national examination board, Islamic banks and others. A lot of aspects have to be taken into consideration; which will take a lot of the government budget and research need to be done before implementing the strategy. The most important concern is the scarcity of human capital that can teach and educate Islamic banking and finance to the students. Thus, this study also compared the knowledge of products and services offered by the banks among the customers of conventional banks in Malaysia. Therefore, hypothesis 2 was generated, as discussed below.

***Hypothesis 2: The majority of Malaysian conventional banks' customers do have a fair level of familiarity of products and services offered by the banks.***

Descriptive analysis is employed in responding to Hypothesis 2. The respondents for this section does not include the customers of Islamic banks as this set of questionnaires were only directed to customers of conventional banks. The conclusive results and a detailed discussion of the descriptive analysis were available in Table 6.12 (Chapter 6). The analysis results stated the frequency and percentage distribution of awareness and knowledge of products and services of conventional bank. The result showed that the respondents' awareness and knowledge of conventional banking products and services are very good. From the total of 22 types of products and services, only 4 products or services were less known by the participants. This result revealed that most of the respondents had more knowledge and awareness of most of the conventional banking products and services, which suggested that the null hypothesis that the majority of Malaysian conventional banks customers do have a fair level of familiarity with products and services of conventional banks can be accepted. Subsequently, the researcher conducted extended analyses in order to respond to Hypothesis 2, which considers the level of knowledge and awareness of the respondents of the conventional banks.

*H<sub>2-1</sub>: There are no statistically significant differences between different gender groups in the level of familiarity of products and services offered by the banks.*

The finding of the study (see Table 7.8, in Chapter 7) indicates that statistically there is a significant difference between different gender groups in the level of familiarity with products and services of conventional banks. The male respondents have more knowledge and awareness of the products and services based on the mean score. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted.

*H<sub>2-2</sub>: There are no statistically significant differences across various age groups in the level of familiarity of products and services offered by the banks.*

For this hypothesis, the findings implied that there is statistically a significant difference across various age groups in the level of familiarity with products and services of conventional banks. The result of the study (refer to Table 7.9, in Chapter

7) suggested that respondents aged between 21 to 30 years old and 41 to 50 years old had more knowledge and awareness of the products and services. Therefore, based on the mean scores, the null hypothesis is rejected and the alternative hypothesis is accepted.

*H<sub>2-3</sub>: There are no statistically significant differences across various income level groups in the level of familiarity of products and services offered by the banks.*

The results in Table 7.10 (Chapter 7) also signifies that there is a statistically significant difference across various income level groups in the level of familiarity with products and services of conventional banks. The findings of the study revealed that the respondents who earned between of RM 1,001 to RM 3,000 per month had more knowledge and awareness of the products and services. Hence, the null hypothesis is rejected and the alternative hypothesis is accepted.

*H<sub>2-4</sub>: There are no statistically significant differences across various educational backgrounds and qualification profile groups in the level of familiarity of products and services offered by the banks.*

Similarly, the findings depicted in Table 7.11 (Chapter 7) pointed out that respondents who had higher education level (other qualification) had more knowledge and awareness of the products and services offered by these banks. In other words, there is statistically a significant difference across various educational backgrounds and qualification profile groups in the level of familiarity with the products and services. Consequently, the null hypothesis is rejected and the alternative hypothesis is accepted.

*H<sub>2-5</sub>: There are no statistically significant differences between customers of local-owned and foreign-owned conventional banks in the level of familiarity of products and services offered by the banks.*

As for this category, given that there was statistically a significant difference between customers of local-owned and foreign-owned conventional banks in the level of familiarity with the products and services, the null hypothesis is also rejected and the alternative hypothesis is accepted. The result (refer to Table 7.12, in Chapter 7)

shows that respondents of local-owned conventional banks have better knowledge and awareness of the products and services.

*H<sub>2-6</sub>: There are no statistically significant differences across various groups with different durations of banking relationships in the level of familiarity of products and services offered by the banks.*

The results reveal that there is statistically a significant difference in terms of the level of familiarity with products and services across various groups with different durations of banking relationships. Table 7.13 (in Chapter 7) indicated that respondents who had shorter relationship duration with conventional banks (1 to 3 years) have more knowledge and awareness of the products and services. As a result, the null hypothesis is rejected and the alternative hypothesis is accepted.

In summary, as the discussion in Section 7.2.2 (Chapter 7) shows, all control variable categories, namely 'gender', 'age', 'income level', 'educational background', 'type of ownership', and 'relationship duration' for conventional banks, attained the level of statistical significance, which indicates that there are significant mean differences in terms of awareness concerning the products and services across various groups in each group. The results indicates that male respondents, aged between 21-30 years old and 41-50 years old, earning RM 1,001 to RM 3,000 monthly, respondents from a higher level of education background (other qualification), respondents of local-owned conventional bank, and those with a shorter period of banking relationship (1-3 year), have better knowledge and awareness of products and services rendered by these banks.

### **9.3 REFLECTING ON THE FINDINGS RELATED TO THE IDENTIFICATION OF BANKING SELECTION CRITERIA**

The growing success of Islamic banks is notable and a better understanding of the underlying patronage factors is essential for their sustainability in the future. As asserted by Bley and Kuehn (2004), a better knowledge of the factors that influence these choices can promote the development of suitable strategies to deal with the growing desire for these products and services. For this reason, this study aims to contribute to the literature by examining more carefully the patronage factors that

influence the customers to choose Islamic or conventional banks including the ‘religious obligation’ as one of the patronage factors for Islamic banks. Hence, hypothesis 3 is formulated.

***Hypothesis 3: Malaysian Islamic banks’ customers apply higher importance to the ‘Religious Obligation’ factor than other banking selection criteria when deciding to open an account with Islamic banks.***

In order to respond to Hypothesis 3, descriptive test is utilised. The final results and a detailed analysis of the descriptive analysis are available in Table 6.13 (Chapter 6). The results show that the mean score of the respondents’ responses towards the patronage factor (religious obligation) is the highest among the rest of the patronage factor (mean: 4.57), with a standard deviation of 0.707. Thus, this suggests that the null hypothesis that the Malaysian Islamic banks’ customers apply higher importance to the ‘religious obligation’ factor than other banking selection criteria when deciding to open an account with Islamic banks can be accepted.

The findings of this study are consistent with other studies on Malaysia and Middle East countries such as study by Mohd-Karim (2010), Marimuthu *et al.* (2010), Haron and Wan Azmi (2005), Bley and Kuehn (2004), Naser *et al.* (1999) and Metawa and Almosawi (1998), who argue that religion is a strong driver of individual preferences to patronage a bank. Marimuthu *et al.* (2010) asserted in their study on Malaysia that religion, cost/benefits, services, convenience and influence of friends/relatives registered a significant relationship (at 0.05) with the acceptance of Islamic banking. In addition, Haron and Wan Azmi (2005) further argue that there is a possibility that religious belief plays an imperative role in the patronage choice by Islamic banks customers in Malaysia.

The study conducted further analyses for Hypothesis 3 with the objective of determining whether there are any statistical differences between various categories of Malaysian Islamic banks’ customers who gave higher importance to the religious obligation’ factor than other banking selection criteria when deciding to open an account with Islamic banks. Table 9.2 shows the summary of the result.



**Table 9.2: Kruskal-Wallis and Mann-Whitney Test for ‘Religious Obligation’ Factor**

Control Variables	Result
Gender	No significant difference
Age	No significant difference
Income Level	No significant difference
Education level	Significant difference
Type of ownership	No significant difference
Type of Islamic bank	No significant difference
Relationship duration	Significant difference

Table 9.2 presents the results of the Kruskal-Wallis and Mann-Whitney test for ‘religious obligation’ factor. Based on the findings, only two control variables (education level and relationship duration) have shown significant difference between the groups of respondents. The remaining control variables; gender, age, income level, type of ownership, and type of Islamic banks have no significant difference.

*H<sub>3-1</sub>: There are no statistically significant differences in terms of preference between different gender groups when considering the religious factor as an important patronage criterion for deciding to open an Islamic banking account.*

The finding of the study (see Table 7.18, in Chapter 7) indicate that there is no significant difference across the gender groups on ‘religious obligation’ factor as one of the banking selection criteria for Islamic banks. As a result, the null hypothesis is accepted, as there is no significant difference between the different gender groups when considering the religious factor as an important patronage criterion.

*H<sub>3-2</sub>: There are no statistically significant differences across various age groups’ preferences when considering the religiosity factor as an important patronage criterion for opening Islamic banking account.*

The null hypothesis is accepted as there is no statistically significant difference between the different age groups when considering the religious factor as an important patronage criterion when deciding to open an Islamic banking account.

This was based on the finding of the study depicted in Table 7.18, in Chapter 7 that indicates no significant difference in terms of the mean scores across the different age groups on ‘religious obligation’ factor as one of the banking selection criteria for Islamic banks.

*H<sub>3-3</sub>: There are no statistically significant differences in term of preference across various income level groups when considering the religiosity factor as an important patronage criterion for opening Islamic banking account.*

As for this category, the result in Table 7.18 (Chapter 7) also specified that there was no significant difference between the various income level groups on ‘religious obligation’ factor as one of the banking selection criteria for Islamic banks. As a result, the null hypothesis is accepted and it can be concluded that there was no significant difference between the different income level groups when considering the religious factor as an important patronage criterion.

*H<sub>3-4</sub>: There are no statistically significant differences across various educational backgrounds and qualification profile groups’ preferences when considering the religiosity factor as an important patronage criterion for opening Islamic banking account.*

For this statement, however, the finding of the study (see Table 7.18, in Chapter 7) indicates that there is a significant statistical difference across the various educational backgrounds on ‘religious obligation’ factor as one of the banking selection criteria for Islamic banks. Based on the mean scores, there is a significant difference between the different educational backgrounds when considering the religious factor as an important patronage criterion when deciding to open an Islamic banking account. As a result, the null hypothesis is rejected and the alternative hypothesis is accepted.

*H<sub>3-5</sub>: There are no statistically significant differences in terms of preference between customers of stand-alone Islamic banks and Islamic subsidiaries when considering the religiosity factor as an important patronage criterion for deciding to open an Islamic banking account.*

As for this category, the finding of the study (refer to Table 7.18, in Chapter 7) shows that there was no significant difference across the types of Islamic banks on 'religious obligation' factor as one of the banking selection criteria for Islamic banks. Therefore, the null hypothesis is accepted and it can be concluded that there is no significant difference in terms of preference between the customers of different types of Islamic banks when considering the religious factor as an important patronage criterion.

*H<sub>3-6</sub>: There are no statistically significant differences in terms of preference between customers of local-owned and foreign-owned Islamic banks when considering the religiosity factor as an important patronage criterion for deciding to open an Islamic banking account.*

For this statement, similarly, the null hypothesis is accepted, as there is no significant difference in terms of preference between the customers of local-owned and foreign-owned Islamic banks when considering the religious factor as an important patronage factor. In other words, there was no significant difference across the types of ownership on 'religious obligation' factor as one of the banking selection criteria for Islamic banks as indicated in Table 7.18 (in Chapter 7).

*H<sub>3-7</sub>: There are no statistically significant differences in terms of preference across various groups with different durations of banking relationships when considering the religiosity factor as an important patronage criterion for opening Islamic banking account.*

The finding of the study (refer to Table 7.18, in Chapter 7) signifies that there is a statistically significant difference across the different durations of banking relationship on 'religious obligation' factor as one of the banking selection criteria for Islamic banks. Hence, the null hypothesis is rejected and it can be concluded that there is a significant difference in terms of preference across the various groups with different durations of banking relationship when considering the religious factor as an important patronage criterion.

The statistical results indicated that there is a statistically significant difference in the belief that the 'religious obligation' is an important aspect for the 'education level', and also 'relationship duration' categories. In the 'education level' category, the  $p$ -value of 0.059 is lower than the critical  $p$ -value of 0.10, which implies that there is a significant difference across the groups. The statistical figures suggested that respondents from the higher education level group, *i.e.* 'others' (mean: 321.00) and 'postgraduate' (mean: 278.84) believed that the 'religious obligation' to be more important than those from the lower educational level groups. As expected before, those who have higher level of education considered 'religious obligation' as important criteria for patronising Islamic banks, because they have better knowledge about the religious doctrine through formal education or everyday exposure.

As for the 'relationship duration' category, the  $p$ -value of 0.029 is significantly lower than the critical  $p$ -value limit of 0.10. The results also suggest that the significant differences are in favour of the respondents, who had longer banking relationship duration, *i.e.* 'more than 5 years' (mean: 258.93). The results also indicate that they claimed that 'religious obligation' is a crucial factor more often than the respondents who experienced shorter banking relationship duration. The longer the duration of the relationship, the more exposures the respondent received from the Islamic bank. Thus, as initially predicted, these exposures were believed to add knowledge and enhanced their conviction that Islamic obligation is an important factor for banking selection criteria.

In conclusion, there is a statistically significant difference (in the case of educational background and relationship duration) when considering the religious factor as an important criterion when deciding to open an account with an Islamic bank. Therefore, 'religious obligation' factor does affect customers' decision when deciding to patronage a bank resulting into choosing Islamic bank.

***Hypothesis 4: Malaysian banks' customers apply equal importance to the customer service quality factor along with other banking selection criteria when deciding to open an account with a bank in Malaysia.***

Regardless of the argument that Islamic banks' customers choose Islamic bank because of the religious motivation, previous empirical studies found that religious obligation was not the only criterion to patronise Islamic banks. Many of the banking

patronage studies identify other factors such as ‘fast and efficient service’, ‘friendliness of bank personnel’ (Haron *et al.*, 1994), ‘ambience’ and ‘advertising’ (Gerrard and Cunningham, 1997), ‘cost and benefits’ (Ahmad and Haron, 2002), and ‘secure feeling’ (Mokhlis *et al.*, 2008) as either equally if not more essential factor for the customers in selecting a particular bank.

In furthering the enquiry in this study, descriptive analysis is utilised in responding to Hypothesis 4. The conclusive results and a detailed discussion of the descriptive analysis are available in Table 6.13 (Chapter 6) in the form of mean scores and standard deviation of the patronage factors. The result shows that the mean scores (4.46) for the customer service quality ranked third out of eleven factors. This result implies that Malaysian banks’ customers apply high importance to the service quality factor than the other banking selection criteria when deciding to open an account with a bank in Malaysia. Hence, the null hypothesis is accepted. Subsequently, the study conducted further analyses in order to respond to Hypothesis 4, which related to the service quality factors through sub-hypotheses:

The finding of this study is also validated by other studies including Gerrard and Cunningham (1997) and Marimuthu *et al.*, 2010. The study by Gerrard and Cunningham (1997) found that there is no difference in banking selection criteria between Muslims and non-Muslims in Singapore. In addition, their study shows that nearly 25% of the feedback shows that religion was not the only basis for choosing an Islamic bank, which also found that financial reputation and quality service are the main factors affecting the customers’ decision to select banks. On the other hand, the study by Marimuthu *et al.* (2010) states that cost-benefit was the most important criterion followed by convenience and service delivery for the acceptance of Islamic banking in Malaysia.

*H<sub>4.1</sub>: There are no statistically significant differences between customer service quality oriented factor and other factors as an important patronage criterion for opening a bank account.*

Factor Analysis was used to respond to the hypothesis *H<sub>4.1</sub>*. The findings (refer to Table 7.17, in Chapter 7) indicate that there is a significant difference between customer service quality oriented factor and other factors as an important patronage

criterion for opening a bank account. The first cluster consists of five factors/variables with the value loading ranging from 0.487 to 0.861. The factors that fit into this cluster ranked according to the highest loading values were: 'courteous and competent'; 'customer service quality'; 'convenience'; 'location being near home or work'; 'number of branches available'; and 'internet banking'. All the factors that are included in the first cluster seem related to services. Therefore, this cluster is named as 'Services Oriented Factors'.

The second cluster with loading values ranging from 0.890 to 0.914 consists of another two factors: 'attractive product package' and 'competitive rate of return'. Since these factors can be associated with financial product related matters, they were termed as 'Financial Oriented Factors'. The final cluster is labeled as 'Marketing Oriented Factors' since the remaining two factors are relevant to marketing matters with the loading values ranged from 0.706 to 0.807, namely 'encouragement from family and friends' and 'image and brand of the bank'.

In order to identify which factor is considered to be the most significant, the average mean from the mean value for each individual item in a particular factor was calculated. Referring to Table 7.17, based on the average mean computation, 'Services Oriented Factors' is ranked first with the average mean value of 4.31 followed by 'Financial Oriented Factors' and 'Marketing Oriented Factors' which achieved an average mean value of 4.16 and 3.91, respectively. As a result, the null hypothesis is rejected, and it can be concluded that there was a significant difference between the 'customer service quality oriented factor' and other factors as important patronage criteria when opening a bank account.

The finding of this study revealed that 'Services Oriented Factor' is an essential factor for customers patronising a bank and the result is consistent with the findings produced by Haron *et al.* (1994) and Ahmad and Haron (2002). The study by Haron *et al.* (1994) asserts that the most significant factors in the bank patronage factor for Muslims and non-Muslims in Malaysia are: 'the provision of a fast and efficient service'; and 'friendliness of bank personnel'. Furthermore, Ahmad and Haron (2002) claim that the most important factor perceived by corporate customers in selecting their banks is the cost of the services and products.

#### **9.4 REFLECTING ON THE FINDINGS RELATED TO THE CUSTOMERS' EXPECTATION AND PERCEPTION OF THE BANKS' SERVICE QUALITY DIMENSIONS**

This study aims to evaluate customers' expectation and perception of Malaysian banks' service quality dimensions in a comparison analysis. It is argued that expectations should differ between settings and it is reasonable to expect that perceptions of quality are influenced by expectations (Carman, 1990:47). Expectations are important for banking industry, as they can improve satisfaction through improving service quality by lessening expectations. Therefore, several researches have studied the effect of expectation about service performance on post-consumption evaluations of the service (Grönroos, 1984:36). The literature shows that expectations occur primarily from previous experience. Nevertheless, other factors such as word-of-mouth and mass media also play a crucial part in forming the expectations (Carman, 1990:48).

In addition, a consumer's experience of a service can be expected to affect his/her post-consumption assessment of the service quality which he/she has encountered, *i.e.*, the perceived quality of the service; where he/she evaluates his expectations with the service he/she perceived he/she has received (Grönroos, 1984:37). For this reason, the quality of service is heavily reliant on two variables: expected service and perceived service.

In responding to this reality, the survey utilised in this study aims to gauge the customers' expectations and perceptions of service quality in which the respondents were asked about their level of agreement with each of the items in the service quality dimensions (expectation and perception), as formulated in the Hypothesis 5:

***Hypothesis 5: Malaysian banks' customers apply equal importance in terms of their opinion of the expectation and perception of service quality dimensions in overall Malaysian banking.***

The descriptive analysis results in Table 9.3 and 6.32 (Chapter 6) indicate that there are statistically significant differences between the expectation mean and the perception mean of the service quality dimensions in Malaysian banking as a whole.

The results suggest that the mean score of the perception category are lower than the expectation category. In other words, Malaysian banks' customers have higher expectation on the quality of the services offered by banks, however, the banks' actual performance in relation to service quality are below expectation leading to a perception of low service quality. Thus, based on the results, the null hypothesis is rejected and the alternative hypothesis is accepted.

**Table 9.3: Average Mean of the Service Quality Dimensions in terms of Expectations and Perceptions**

Service Quality Dimensions	Average Mean for Expectation	Average Mean for Perception	Asymp. Sig (Wilcoxon Signed Ranks Test)
<b>Reliability</b>	4.64	4.04	0.000
<b>Responsiveness</b>	4.60	3.91	0.000
<b>Assurance</b>	4.58	4.03	0.000
<b>Islamic Values</b>	4.54	4.01	0.000
<b>Social Responsibility</b>	4.44	3.94	0.000
<b>Empathy</b>	4.40	3.86	0.000
<b>Tangible</b>	4.38	4.02	0.000

The conclusion reached for this hypothesis confirmed the results of another study by Tahir and Bakar (2007), which assert that the overall service quality provided by the commercial banks was below customers' expectation. In addition, the finding is consistent with the results of other studies such as Padhy and Swar (2009), Kumar *et al.* (2009), Abedniya and Zaeim (2011), Abedniya *et al.* (2011), which also confirmed that there is a gap between expectation and perception dimensions in their cases in favour of expectations. Kumar *et al.* (2009) also asserted in their study that there is still room for improvement on the bank infrastructures and the neat appearance of staff. Furthermore, their findings also recorded a negative service quality gap.

Subsequently, the study conducted further analyses in order to respond to Hypothesis 5, which is to investigate whether there is a consistency in responses. Out of 29 statements, 6 statements were related to the 'Islamic Values' dimension, which aimed to identify the true expectation and perception of the respondents towards the Islamic



banking related matters of service quality. Included in the dimensions were statements such as: 'Provide banking services according to Islamic *Shari'ah*', 'Have well known and trustworthy *Shari'ah* Advisory Board', 'Neither pays nor takes interest on savings and loan accounts', 'Provide profit-sharing investment account', 'Products and services prices are competitive', and 'Employees have knowledge on Islamic banking products and services'. Hence, the study tested the following sub-hypothesis:

*H<sub>5.1</sub>: There are no statistically significant differences between the customers' expectation and perception regarding the 'Islamic Values' dimension.*

The results of the mean analysis of the 'Islamic Values' dimension for expectations and perceptions of service quality are presented in Table 6.23 and 6.30 (in Chapter 6). In summarising, Table 9.3 shows that there are significant differences between the expectations and perceptions of the respondents towards the 'Islamic Values' dimension, as the average mean value for respondents' expectations and perceptions are 4.54 and 4.01 respectively, which indicated a difference of -0.53 (perception minus expectation) implying that expectations are higher than the perceptions. In addition, the *p*-value of the test was 0.000, which is less than 0.05 indicating that there is a significant difference between expectations and perceptions vis-à-vis 'Islamic Values'. Therefore, the alternative hypothesis is accepted.

Based on the results, it can be concluded that the respondents have a higher expectation for the 'Islamic Values' dimension, therefore, in reality, they perceived that the Islamic banks were not successful in delivering the service quality related to 'Islamic Values' dimension as what they had expected to receive. This is evident with the average mean value, as the score for respondents' perceptions are lower than the expectations.

In addition, the statement 'Provide banking services according to Islamic *Shari'ah*' is ranked as first in both the expectation and the perception list as the most important item in relation to 'Islamic Values' dimension with a mean of 4.59 and 4.06 respectively (refer to Table 6.23 and 6.30 in Chapter 6). This finding substantiates the assertion made by Dusuki (2005), who strongly argues that the establishment of

Islamic banking institutions provides an alternative to conventional banking, which offers an opportunity for Muslims to express and exercise their belief in the financial field. Nevertheless, the mean score for the perception is lower than the expectation, which indicates that respondents believed that Islamic banks have not completely provide banking services according to Islamic *Shari'ah* as what they have expected.

On the other hand, the lowest mean score for expectation in relation to 'Islamic Values' dimension is 4.44 for the statement 'Having well known and trustworthy *Shari'ah* Advisory Board'. The result shows that the respondents' expectations towards the *Shari'ah* Advisory board is less important compared to other items in the dimension. As for the perception, the lowest score is 3.94 for the statement 'Products and services prices are competitive'. In this regard, the respondents believed that the price of the products and services of Islamic banks are expensive and not competitive in comparison to conventional banks.

The findings also show that 'Islamic Values' dimension is one of the most important dimensions, which is ranked fourth out of seven dimensions, for both the expectation and perception criteria (refer to Table 9.3). The study, thus, agree with most of the literature on Islamic banks' service quality management, such as Othman and Owen (2001), Shafie *et al.* (2004), Al-Zaabi (2006), and Al-Adwani (2010) who argued that compliance with Islamic law or termed as 'Islamic Values' dimension in this study is one of the most important dimensions of service quality in Islamic banks.

*H<sub>5.2</sub>: There are no statistically significant differences between the customers' expectation and perception regarding the 'Assurance' dimension.*

In this category, the null hypothesis is rejected and the alternative hypothesis is accepted as the mean value for perception is 4.03 which is lower than the expectation's mean value of 4.58. It can, therefore, be concluded that statistically there is a statistically significant difference in 'Assurance' in relation with expectation and perception.

*H<sub>5.3</sub>: There are no statistically significant differences between the customers' expectation and perception regarding the 'Responsiveness' dimension.*

Similar results can also be seen in this category, where the null hypothesis is rejected and the alternative hypothesis is accepted due to the mean scores for expectation is 4.60, which is higher than the perception's mean of 3.91 for 'Responsiveness'. Hence, it can be acknowledged that there is a statistically significant difference in expectation and perception in relation to 'Responsiveness' dimension.

*H<sub>5.4</sub>: There are no statistically significant differences between the customers' expectation and perception regarding the 'Tangible' dimension.*

As for this statement, the results also suggest that the null hypothesis is rejected, as is evident from the perception's mean of 4.02, which is lower than the expectation's mean of 4.38 vis-à-vis the 'Tangible' dimension; therefore, it can be concluded that there is a statistically significant difference between respondents' expectations and perceptions in relation to 'Tangible' dimension.

*H<sub>5.5</sub>: There are no statistically significant differences between the customers' expectation and perception regarding the 'Empathy' dimension.*

The perception's mean of 3.86 is lower than the expectation's mean of 4.40; therefore, there is a significant difference between expectation and perception in relation to in 'Empathy' dimension. Consequently, since there is a statistically significant difference between respondents' expectations and perceptions in relation to 'Empathy' dimension, the null hypothesis is rejected and the alternative hypothesis is accepted.

*H<sub>5.6</sub>: There are no statistically significant differences between the customers' expectation and perception regarding the 'Reliability' dimension.*

Similarly, for the 'Reliability' dimension, the null hypothesis is rejected in favour of the alternative hypothesis, since the perception mean score of 4.04 is lower than the expectation mean score of 4.64. Therefore, there is a statistically significant difference between respondents' expectations and perceptions in relation to 'Reliability' dimension.

*H<sub>5.7</sub>: There are no statistically significant differences between the customers' expectation and perception regarding the 'Social Responsibility' dimension.*

For the 'Social Responsibility' dimension the perception's mean score of 3.94 is lower than the expectation's mean score of 4.44; therefore, there is statistically significant difference in 'Social Responsibility' expectation and perception. Consequently, the null hypothesis is rejected and it can be concluded that there is a significant difference between respondents' expectation and perception in relation to 'Social Responsibility' dimension.

This result implies that customers highly regard banking as an institution that promotes social welfare of the community, alleviates poverty and encourages sustainable development. In addition, Islamic banks should not be exclusively profit oriented; rather it should also aim at responding to the needs of the society as a whole. The finding in this study, thus, supports the assertion made by Dusuki (2005: 172) that Islamic banks should not only focus on commercial factors such as improving product and service quality; and providing viable financial products, but also they should pursue other crucial objectives such as attaining a social welfare objective.

To summarise, the finding suggest that based on the comparison of respondents' actual perceptions of service quality with their expectation, there is a statistically significant difference on all of the 29 attributes examined. The biggest gap (-0.69) is found for the responsiveness dimension. In addition, the study furthered classified the average mean into Islamic banks only and conventional banks only to identify whether there were any significant difference with the results of the average mean for the banks as a whole. Table 6.33 and 6.34 in Chapter 6 present a comparison of average mean of the expectation and perception for Islamic banks only and average mean of the expectation and perception for conventional banks only, respectively. Wilcoxon Signed Ranks test was used to identify whether there were differences between customers' perceptions and expectations in relation to the service quality dimensions. The results indicate that there are significant differences in the expectations and perceptions of the respondents. Thus, the results suggested that there was no significant difference between the result of the banks as a whole and the different type of banks (Islamic banks vs. conventional banks), where the mean score for perceptions are lower than the expectation in all the service quality dimensions.

In reflecting on the results, it should be stated that managing the perceived service quality, as argued by Grönroos (1984:42) implies that the financial institutions have to match the expected service with the perceived service in order to attain customer satisfaction. It is crucial to minimise the gap between the expected service and perceived service as little as possible, as quality problems in service organisations are the result of the mismatch between prior expectations and perceived quality of service (Ghobadian *et al.*, 1994).

In summary, as the discussion so far indicates, all of the service quality dimensions produced a negative gap which means that the service quality received by the customers is below than the satisfactory level. Hence, further steps should be taken to improve the perceived quality of Malaysian banks. As suggested by Grönroos (1984:43), the banks should not offer unrealistic promises about how the services will be performed, and the banks should be customer-oriented in order to satisfy the customers. In the next section, the relationship between customers' satisfaction and service quality dimensions is discussed.

## **9.5 REFLECTING ON FINDINGS RELATED TO CUSTOMERS SATISFACTION**

This study explores the relationship between customers' satisfaction and the service quality dimensions for expectation and perception based service quality. As stated by Storbacka *et al.* (1994: 21), the dominating perspective within service quality research has been to hypothesise that service quality has a positive relationship with customers' satisfaction. They further argue that the current satisfaction paradigm is based on the assumption that customers' actions are based on their perception of quality and satisfaction. Hence, in responding to this assumption, the survey in this study endeavored to determine the relationship between customers' satisfaction and the service quality dimension using the Stepwise Regression Analysis. Thus, Hypothesis 6 was formulated:

***Hypothesis 6: There is a significant relationship between customers' satisfaction and the service quality dimensions for expectation based service quality for the entire sample.***

The Stepwise Regression Analysis was utilised in responding to Hypothesis 6 above. The final outcomes and a detailed discussion of the regression analysis are available in Table 8.3 (Chapter 8) but also in Table 9.4. The regression analysis results suggest that there is a statistically significant relationship between customers' satisfaction and the service quality dimensions for expectation based service quality. Therefore, based on the premise, the null hypothesis is accepted.

**Table 9.4: Stepwise Regression Analysis for Customers' Satisfaction and Service Quality Dimensions.**

Type of banks	Significant Expectation Dimension (P-value of 0.000)	Significant Perception Dimension (P-value of 0.000)
Malaysian banks as a whole	'Tangible' 'Reliability'	'Tangible' 'Assurance' 'Social Responsibility'
Islamic banks	'Tangible' 'Islamic Values'	'Empathy' 'Tangible' 'Islamic Values'
Conventional banks	'Tangible' 'Assurance'	'Tangible' 'Assurance'

*Note:* The customers' satisfaction is the dependent variable and the service quality dimensions are the independent variables.

In order to respond to the hypothesis, further analysis is carried out to see whether there is any significant relationships between the customers' satisfaction and the dimensions for expectation based service quality. Table 9.4 presents the summary of the result of the Stepwise Regression Analysis. The findings of the analysis show that some of the service quality dimensions have positive direct relationship with customers' satisfaction. Thus, the following hypotheses were formulated:

*H<sub>6-1</sub>: There are no statistically significant relationships between the customers' satisfaction and the 'Islamic Values' dimension for expectation based service quality.*

The result in Table 9.4 shows the summary of result for the Stepwise Regression Analysis. The detail of the result (refer to Table 8.3, in Chapter 8) shows that there is no significant relationship between 'Islamic Values' and customers' satisfaction in the case of the entire sample. Consequently, the null hypothesis is accepted and it can be concluded that there is no relationship between customers' satisfaction and 'Islamic Values' dimension for expectation based service quality.

*H<sub>6-2</sub>: There are no statistically significant relationships between the customers' satisfaction and the 'Assurance' dimension for expectation based service quality.*

The result in Table 8.3 (Chapter 8) shows that there is no statistically significant relationship between 'Assurance' dimension and customers' satisfaction for the entire sample. Therefore, the null hypothesis is accepted and it can be acknowledged that there is no statistically significant relationship between customers' satisfaction and 'Assurance' dimension for expectation based service quality.

*H<sub>6-3</sub>: There are no statistically significant relationships between the customers' satisfaction and the 'Responsiveness' dimension for expectation based service quality.*

Similarly, the result in Table 8.3 (Chapter 8) shows that there is no statistically significant relationship between 'Responsiveness' dimension and customers' satisfaction for expectation based service quality.

*H<sub>6-4</sub>: There are no statistically significant relationships between the customers' satisfaction and the 'Tangible' dimension for expectation based service quality.*

The result in Table 8.3 (Chapter 8) shows that there is a statistically significant relationship between 'Tangible' dimension and customers' satisfaction. Hence, it can be concluded that there is a relationship between customers' satisfaction and 'Tangible' dimension for expectation based service quality.

*H<sub>6-5</sub>: There are no statistically significant relationships between the customers' satisfaction and the 'Empathy' dimension for expectation based service quality.*

The result in Table 8.3 (Chapter 8) and in Table 9.4 shows that there was no significant relationship between 'Empathy' dimension and customers' satisfaction implies that the null hypothesis is accepted for expectation based service quality.

*H<sub>6-6</sub>: There are no statistically significant relationships between the customers' satisfaction and the 'Reliability' dimension for expectation based service quality.*

The result in Table 8.3 (Chapter 8) shows that there is a statistically significant relationship between 'Reliability' dimension and customers' satisfaction for expectation based service quality, and hence the null hypothesis is rejected.

*H6-7: There are no statistically significant relationships between the customers' satisfaction and the 'Social Responsibility' dimension for expectation based service quality.*

The result in Table 8.3 (Chapter 8) shows that there is no statistically significant relationship between 'Social Responsibility' dimension and customers' satisfaction implying the null hypothesis is accepted. Therefore, it can be concluded that there is no relationship between customers' satisfaction and 'Social Responsibility' dimension for expectation based service quality.

***Hypothesis 7: There is a significant relationship between customers' satisfaction and the service quality dimensions for perception based service quality for the entire sample.***

The Stepwise Regression Analysis was also employed in responding to Hypothesis 7. The regression analysis results confirmed that there is a statistically significant relationship between customers' satisfaction and the service quality dimensions for perception based service quality. Therefore, based on the results, the null hypothesis is accepted. The final outcomes and a detailed discussion of the regression analysis are available in Table 8.3 (Chapter 8), which is summarised in Table 9.4.

Subsequently, further analysis is conducted to identify which dimensions of perception based service quality have significant relationship with customers' satisfaction.

*H<sub>7-1</sub>: There are no statistically significant relationships between the customers' satisfaction and the 'Islamic Values' dimension for perception based service quality.*

In responding to the hypothesis, the regression analysis result in Table 8.6 (Chapter 8) for the whole sample shows that there is no statistically significant relationship between 'Islamic Values' dimension and customers' satisfaction. Therefore, the null hypothesis is accepted and it can be concluded that there is no statistically significant relationship between customers' satisfaction and 'Islamic Values' dimension for perception based service quality.

*H<sub>7-2</sub>: There are no statistically significant relationships between the customers' satisfaction and the 'Assurance' dimension for perception based service quality.*



As for this category, the result in Table 8.6 (Chapter 8) or Table 9.4 shows that there is a statistically significant relationship between ‘Assurance’ dimension and customers’ satisfaction for perception based service quality. Hence, the null hypothesis is rejected.

*H<sub>7.3</sub>: There are no statistically significant relationships between the customers’ satisfaction and the ‘Responsiveness’ dimension for perception based service quality.*

In this category, the result in Table 8.6 (Chapter 8) shows that there is no statistically significant relationship between ‘Responsiveness’ dimension and customers’ satisfaction for perception based service quality. Hence, the null hypothesis is accepted.

*H<sub>7.4</sub>: There are no statistically significant relationships between the customers’ satisfaction and the ‘Tangible’ dimension for perception based service quality.*

For this statement, the result in Table 8.6 (Chapter 8) reveals that there is a significant relationship between ‘Tangible’ dimension and customers’ satisfaction for perception based service quality for the whole sample. As a result, the null hypothesis is rejected.

*H<sub>7.5</sub>: There are no statistically significant relationships between the customers’ satisfaction and the ‘Empathy’ dimension for perception based service quality.*

The result in Table 8.6 (Chapter 8) suggests that the null hypothesis is accepted as there is no statistically significant relationship between ‘Empathy’ dimension and customers’ satisfaction.

*H<sub>7.6</sub>: There are no statistically significant relationships between the customers’ satisfaction and the ‘Reliability’ dimension for perception based service quality.*

Similarly, the result in Table 8.6 (Chapter 8) demonstrates that there is no statistically significant relationship between ‘Reliability’ dimension and customers’ satisfaction. Consequently, the null hypothesis is accepted and the alternative hypothesis is rejected.

*H7-7: There are no statistically significant relationships between the customers' satisfaction and the 'Social Responsibility' dimension for perception based service quality.*

As for this category, the result in Table 8.6 (Chapter 8) shows that there is a statistically significant relationship between 'Social Responsibility' dimension and customers' satisfaction. Thus, the null hypothesis is rejected and it can be concluded that there was a significant relationship between customers' satisfaction and 'Social Responsibility' dimension for perception based service quality.

***Hypothesis 8: There is a significant relationship between customers' satisfaction and the service quality dimensions of Islamic banks.***

The response to Hypothesis 8 is also based on the Stepwise Regression Analysis as mentioned in Table 8.11 and 8.12 (Chapter 8), which is summarised in Table 9.4. The regression analysis results validated that there is a statistically significant relationship between customers' satisfaction and the service quality dimensions of Islamic banks. Therefore, based on the results, the null hypothesis is accepted.

Next, additional analysis was conducted to identify which service quality dimensions of Islamic banks have significant relationship with the customers' satisfaction.

*H<sub>8-1</sub>: There are no statistically significant relationships between the customers' satisfaction and the service quality dimension of Islamic banks for expectation based service quality.*

In responding to statement, the result in Table 8.11 (Chapter 8) suggests that there is a statistically significant relationship between 'Tangible' and 'Islamic Values' service quality dimensions and customers' satisfaction. As a result, the null hypothesis is rejected and it can be concluded that there is a significant relationship between customers' satisfaction and two of the identified service quality dimensions ('Tangible' and 'Islamic values' dimension) of Islamic banks for expectation based service quality. However, the null hypothesis is accepted for the rest of the dimensions.

*H8-2: There are no statistically significant relationships between the customers' satisfaction and the service quality dimension of Islamic banks for perception based service quality.*

As regards to the perceptions of the participants for the Islamic banks, the null hypothesis is rejected as there is a significant relationship between customers' satisfaction and the three service quality dimensions, namely 'Empathy', 'Tangible' and 'Islamic Values' for perception based service quality. The result in Table 8.12 (Chapter 8) confirmed that there is a significant relationship between the three service quality dimensions and the customers' satisfaction. However, the null hypothesis is accepted for the rest of the dimensions.

In addition, it should be noted that the 'Islamic Values' dimension is considered as important dimension by the respondents of the Islamic banks. The findings of this study validated that 'Islamic Values' had a direct positive effect on customers' satisfaction. The result is consistent with the finding of the banking selection criteria which denoted that respondents of Islamic banks perceived 'Islamic Values' as the most important criterion in banking selection criteria.

***Hypothesis 9: There is a significant relationship between customers' satisfaction and the service quality dimensions of conventional banks.***

Similarly, the Stepwise Regression Analysis is also utilised in responding to Hypothesis 9. The regression analysis results verified that there is a significant relationship between customers' satisfaction and the service quality dimensions of conventional banks. For that reason, the null hypothesis is accepted. The final outcomes and a detailed discussion of the regression analysis are available in Table 8.17 and 8.18 (Chapter 8) and summarised in Table 9.4.

Consequently, further analysis is conducted to identify which dimensions of service quality of conventional banks have significant relationship with customers' satisfaction.

*H<sub>9.1</sub>: There are no statistically significant relationships between the customers' satisfaction and the service quality dimension of conventional banks for expectation based service quality.*

In the result presented in Table 8.17 (Chapter 8) indicates that there is a statistically significant relationship between ‘Tangible’ and ‘Assurance’ service quality dimensions and customers’ satisfaction and hence in the case of these two dimensions for conventional banks expectation based service quality the null hypothesis is rejected. However, the results indicate that the null hypothesis is accepted for the rest of the service quality dimensions in the expectations oriented cases.

*H9-2: There are no statistically significant relationships between the customers’ satisfaction and the service quality dimension of conventional banks for perception based service quality.*

As regards to perception based service quality in the case of conventional banks, the result in Table 8.18 (Chapter 8) demonstrates that there is a significant relationship between ‘Tangible’ and ‘Assurance’ service quality dimensions and customers’ satisfaction implying the rejection of null hypothesis that there is a significant relationship between customers’ satisfaction and service quality dimensions for conventional banks perception based service quality. On the other hand, the results dictate that in the case of remaining dimensions, there is no statistically significant relationship with customers’ satisfaction according to the perceptions.

In overall, the results of this study differs from the findings of Ahmad *et al.* (2010) who examined the relationship between service quality and customer satisfaction regarding Islamic banks as well as conventional banks in Pakistan. Their findings revealed that there is a strong positive relationship between service quality and customers’ satisfaction both for Islamic and conventional banks. However, the findings of this study reveal that only certain dimensions of service quality has positive relationship with customers’ satisfaction.

To conclude this section, the most important dimension in service quality that have significant relationship with customers’ satisfaction as confirmed by Stepwise Regression Analysis is ‘Tangible’ dimension, as it is statistically significant in all three categories sample universes (Malaysian banks as a whole, Islamic banks, and conventional banks). The findings shows that customers satisfaction were affected most by the ‘Tangible’ dimension such as the banks’ physical appearance, the equipment, the facilities, and the neat appearance of the personnel. Hence, by improving the quality of physical service, customers’ satisfaction can increase

(Storbacka *et al.*, 1994:23). This can be done by customising a service to meet or exceed the needs of a heterogeneous population of customers, such as more facilities for disabled customers (Nilsson *et al.*, 2001).

## **9.6 CORRELATING SERVICE QUALITY PERFORMANCE, HORIZONTAL DIFFUSION AND FINANCIAL PERFORMANCE**

To reiterate, one of the objectives of this study is to measure the potential correlation between financial performance and service quality scores of the respective sampled banks. For this, out of a total of 31 banks sampled in this study, 6 banks (3 Islamic banks; BIMB, BMMB and Maybank Islamic and 3 conventional banks; CIMB, Maybank and Public Bank) were selected to be further analysed. The selection of the banks is based on the percentage rate of respondents coming from each bank category. Thus, the study excluded the banks that had customers represented in the study below 5%, as it was considered insignificant to do so.<sup>1</sup> In order to test whether there is a correlation between the service quality performance (overall mean score of each bank) and the banks' financial performance, the following hypothesis was formulated:

***Hypothesis 10: There is no correlation between the service quality performance and the financial performance in the sampled banks.***

In order to analyse Hypothesis 10, the financial performance indicators have to be established. For this, return on assets (ROA) and return on equity (ROE) of the selected 6 banks were calculated, which stands for the profitability ratios of the banks. In addition, the ratios were analysed to see whether there is a correlation between the financial performance with the service quality performance and the customers' satisfaction mean scores for the banks. Table 9.5 and Figure 9.1 show the summary of the result for ROA, ROE, service quality (SQ) and customer satisfaction (CS) analysis for CIMB, Maybank, Public Bank, BIMB, BMMB and Maybank Islamic.

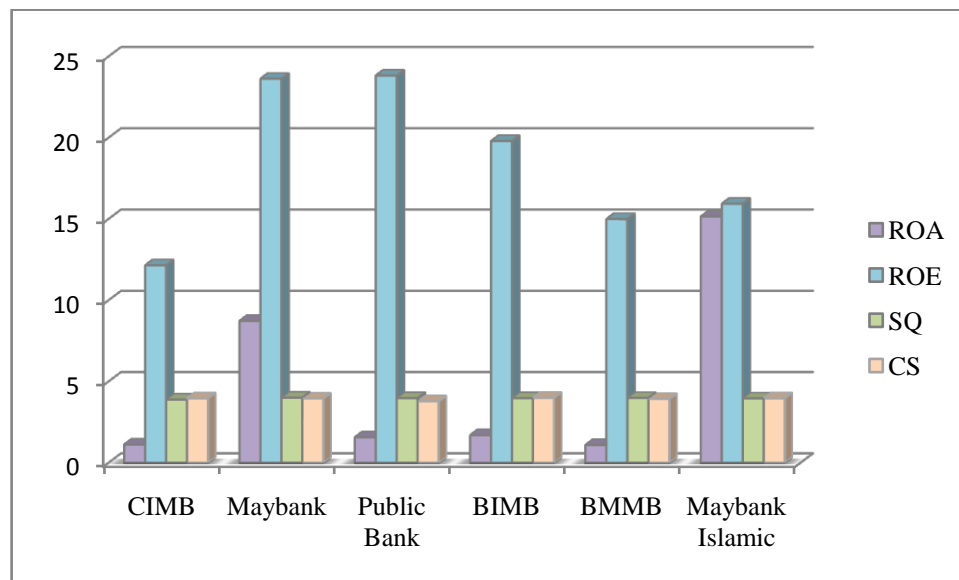
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<sup>1</sup>Indeed, the time constraints and data accessibility is one of the other factor as to why the sampled banks are only 6 in this particular section which focuses on the correlation between financial performance and service quality management scores.

**Table 9.5: Service Quality and Financial Performance Relationship of Malaysian Banks**

Type of Bank	Banks	Financial Performance (2010)		Service Quality Performance (SQP) and Customer Satisfaction (CS)	
		ROA	ROE	SQ	CS
Conventional Banks	CIMB	1.12	12.15	3.89	3.97
	Maybank	8.73	23.63	4.01	3.96
	Public Bank	1.57	23.83	3.98	3.79
Islamic Banks	BIMB	1.7	19.8	3.98	4.00
	BMMB	1.1	15.0	3.99	3.93
	Maybank Islamic	15.15	15.94	3.96	3.97

**Figure 9.1: Service Quality and Financial Performance Relationship of Malaysian Banks**



The result in Figure 9.1 and Table 9.5 shows that Maybank Islamic (Islamic bank) has the highest score for ROA followed by Maybank (conventional bank), BIMB (Islamic bank), Public Bank (conventional banks), CIMB (conventional bank) and BMMB (Islamic bank) respectively. As for ROE, Public Bank (conventional bank) scored the highest while CIMB (conventional bank) scored the lowest.

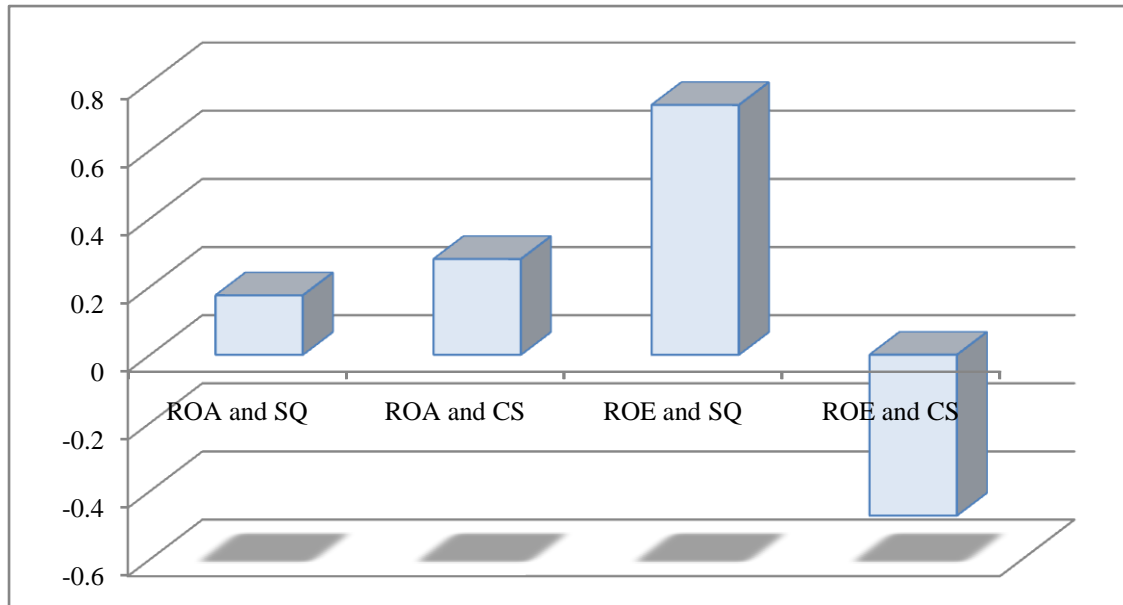
However, the mean scores for the service quality and customer satisfaction for all the banks are not much different. In addition, Maybank has the highest mean scores for SQ, meanwhile BIMB scored the highest for CS. Although Maybank Islamic and Public Bank had the highest score for their financial performance (ROA and ROE), their score on service quality performance (SQ and CS) do not show the same high performance.

Thus, further statistical analysis beyond visual description is conducted to statistically test the relationship between the banks' service quality performance and their financial performance, for which correlation analysis conducted. The results are presented in Table 9.6 and Figure 9.2.

**Table 9.6: Correlation Coefficient Estimates for Financial Performance and the Service Quality Performance of Malaysian Banks**

	<b>Correlation Coefficient</b>
<b>ROA and Service Quality</b>	0.17439177
<b>ROA and Customer Service</b>	0.28089769
<b>ROE and Service Quality</b>	0.73303601
<b>ROE and Customer Service</b>	-0.4717908

**Figure 9.2: Correlation Coefficient Estimates for Financial Performance and the Service Quality Performance of Malaysian Banks**



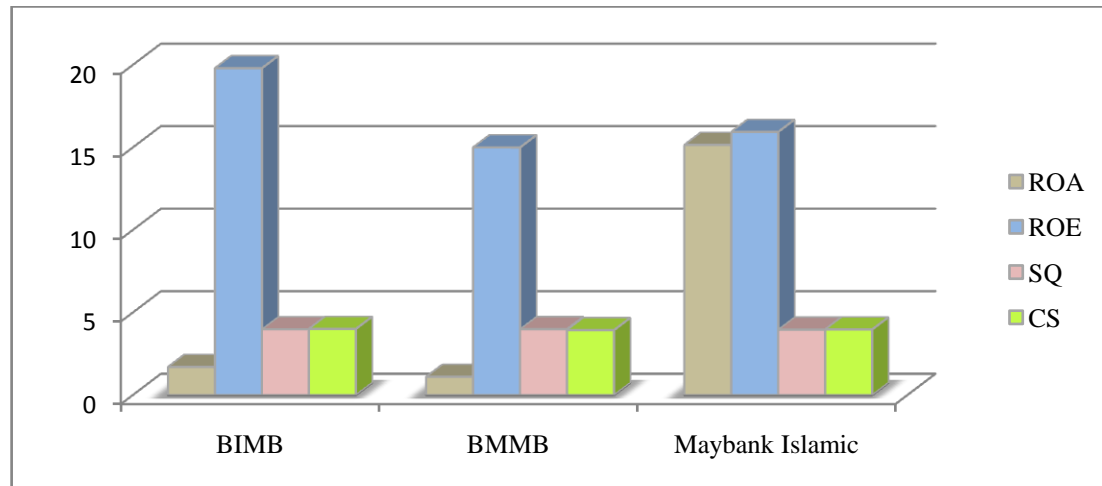
The result in Table 9.6 and Figure 9.2 shows that there is a different degree of correlation between service quality performance and the banks' financial performance. The highest correlation is between ROE and SQ (73%), which is considered acceptable. However, there is no perfect correlation existed (close to 1). In most of the cases, the correlations (ROA and SQ, ROA and CS, ROE and CS) have weak relationship except for ROE and SQ, which have relatively strong correlation. In addition, it is expected to have a positive relationship for all correlations; however, the relationship between ROE and CS is negative. Consequently, the null hypothesis is accepted and it can be concluded that there is no strong correlation between service quality performance and the banks' financial performance.

The study conducted extended analyses in order to respond to Hypothesis 10, which considers the relationship between service quality performance and the financial performance of Islamic and conventional banks separately. These analyses are important to identify whether there is any different pattern between the relationship of service quality performance and the financial performance of the Islamic and conventional banks. Hence, the following hypothesis is formulated:



$H_{10-1}$ : There is no correlation between the service quality performance and the financial performance in the sampled Islamic banks.

**Figure 9.3: Correlating Service Quality Performance and Financial Performance of Islamic Banks**

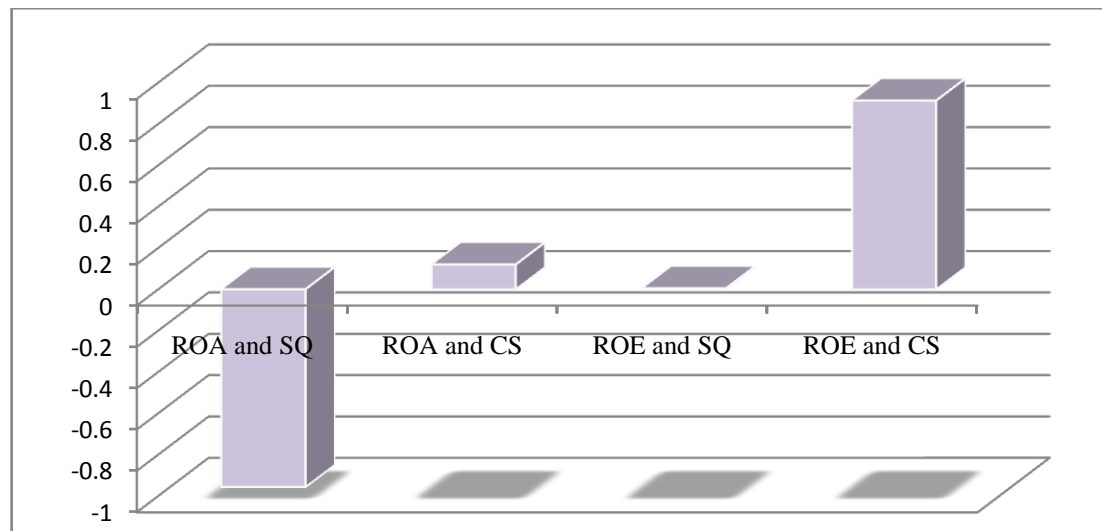


Based on the estimations in Table 9.5, Figure 9.3 illustrates the service quality performance and the financial performance of 3 Islamic banks (BIMB, BMMB and Maybank Islamic). The result shows that there is a significant difference between the ROA and ROE scores for all the sampled Islamic banks except Maybank Islamic. Most of the bank scores higher on their ROE as compared to their ROA. However, for Maybank Islamic, the difference is not that significant. Whereas, for the mean scores of service quality and customers' satisfaction, there are not much differences between the mean scores for all the three banks. The correlation estimates for the SQP and financial performance are depicted in Table 9.7 and Figure 9.4.

**Table 9.7: Correlation Coefficient Estimates for Financial Performance and the Service Quality Performance of Islamic Banks**

	Correlation Coefficient
ROA and Service Quality	-0.9566
ROA and Customers' Satisfaction	0.1197
ROE and Service Quality	0.0042
ROE and Customers' Satisfaction	0.9130

**Figure 9.4: Correlating Financial Performance and the Service Quality  
Performance of Islamic Banks**



Similar to the result for the Malaysian banks as a whole, the result for the selected Islamic banks in Table 9.7 and Figure 9.4 shows that there is a different degree of correlation between service quality performance and the financial performance of Islamic banks. The highest correlation is between ROE and CS (91%), which is regarded as strong but not perfect correlation. As can be seen, the correlation estimates (ROA and SQ, ROA and CS, ROE and SQ) indicate mostly a weak relationship except for ROE and CS, which have strong correlation. It should also be noted that the relationship between ROA and SQ of the Islamic banks is negative, which is indeed unexpected. This implies that there is no conclusive result for the correlation between the financial performance and service quality performance and customer satisfaction. Therefore, the null hypothesis is accepted and it can be concluded that there is no strong correlation between service quality performance and the Islamic banks' financial performance.

In the following section, the same analysis conducted for the conventional banks. The hypothesis for the conventional bank is formulated as follows:

*H<sub>10-2</sub>: There is no correlation between the service quality performance and the financial performance in the sampled conventional banks.*

Based on the estimations on Table 9.5, the correlation results are depicted in Figure 9.5.

**Figure 9.5: Correlating Financial Performance and Service Quality**  
**Performance of Conventional Banks**

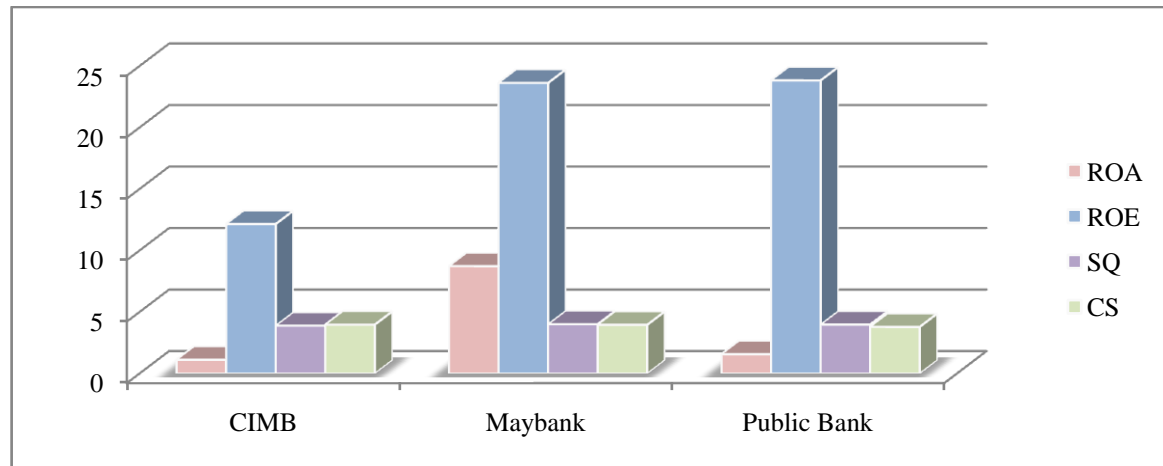
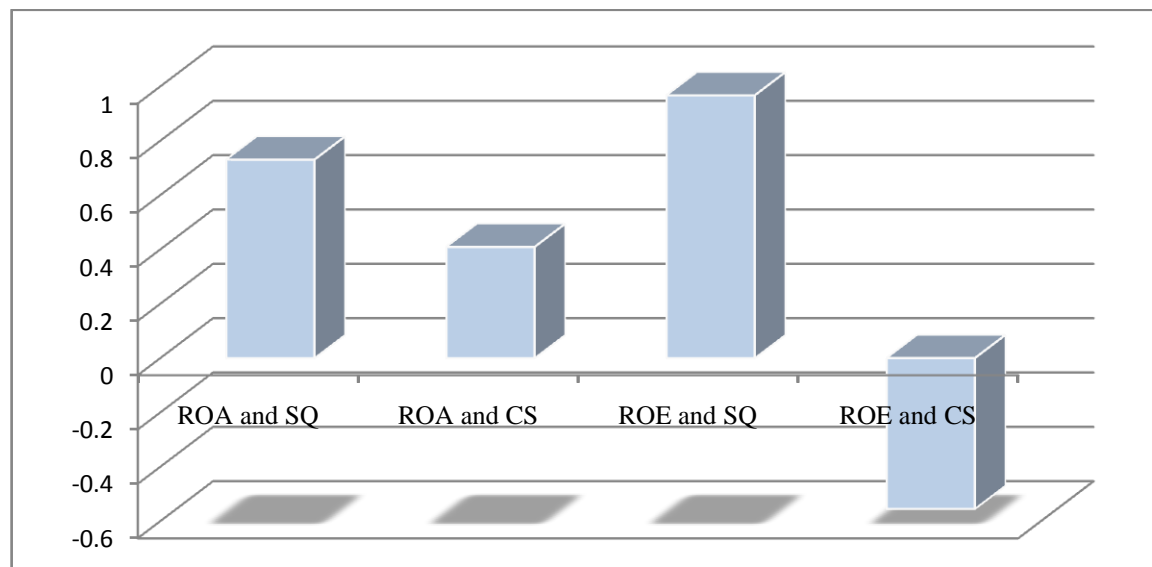


Figure 9.5 shows the service quality performance and the financial performance of conventional banks (CIMB, Maybank and Public Bank). The result demonstrates that there is a significant difference between the ROA and ROE scores for all the banks. Most of the banks score higher on their ROE compared to their ROA. As for the service quality and customer satisfaction' mean scores, there are not much differences between the mean scores for all the three banks. The correlation estimates are presented in Table 9.8 and Figure 9.6.

**Table 9.8: Correlation Coefficient Estimates for Financial Performance and the Service Quality Performance of Conventional Banks**

	Correlation Coefficient
ROA and Service Quality	0.730384
ROA and Customers' Satisfaction	0.409066
ROE and Service Quality	0.967025
ROE and Customers' Satisfaction	-0.554700

**Figure 9.6: Correlating the Financial Performance and the Service Quality Performance of Conventional Banks**



The results in Table 9.8 and Figure 9.6 evidences that there is a different degree of correlation between service quality performance and the financial performance of conventional banks. The highest correlation is for ROE and SQ (96.7%), which is regarded as strong correlation, again, however, there is no perfect correlation existed. In majority of the categories, the correlations (ROA and SQ, ROA and CS, ROE and CS) have weak relationship apart from ROE and SQ which have nearly perfect correlation. Furthermore, as anticipated earlier similar to the entire sample of Malaysian banks and Islamic banks only, the relationship between ROE and CS of the conventional banks is negative.

In conclusion, the findings of the study present that there is no perfect correlation between the service quality performance (SQ and CS) of the Malaysian banks as a whole and their financial performance in terms of ROA and ROE. Similarly, consistent results were attained for the analyses of Islamic and conventional banks, which were carried out individually. Hence, the null hypothesis is accepted and it can be concluded that there is no strong correlation between service quality performance and the conventional banks' financial performance.

The finding is in harmony with the study of Al-Adwani (2010) in Kuwait. Her study found that although Kuwait Finance House has the highest service quality

performance, the bank could not achieve the highest ROA and ROE compared to two other banks in Kuwait.

## 9.7 CORRELATING HORIZONTAL DIFFUSION OF THE BANKS AND SERVICE QUALITY SCORE

This research extends to examine the potential relationship between horizontal diffusion of banks as represented by their branch size and their service quality performance. In other words, it is assumed that if a bank has many branches, it implies that it is perceived well by the customers in terms of its service offering; therefore, the service quality must be better. For these, again due to the limitation of the space and time, as in the previous analysis, only six banks are sub-sampled. Hence, the following hypothesis is formulated:

***Hypothesis 11: There is no relationship between horizontal diffusion of the entire banks and their service quality performance.***

*H<sub>11-1</sub>: There is no relationship between horizontal diffusion of the Islamic banks and their service quality performance.*

*H<sub>11-2</sub>: There is no relationship between horizontal diffusion of the conventional banks and their service quality performance.*

**Table 9.9: The Service Quality Performance and the Number of Branches of the Entire Sampled Banks**

Type of Bank	Banks	SQ	No. of Branches
<b>Conventional Banks</b>	Maybank	4.01	377
	CIMB	3.89	362
	Public Bank	3.98	252
<b>Islamic Banks</b>	BIMB	3.98	115
	BMMB	3.99	56
	Maybank Islamic	3.96	15

**Figure 9.7: The Service Quality and the Number of Branches for the Entire Sampled Banks**

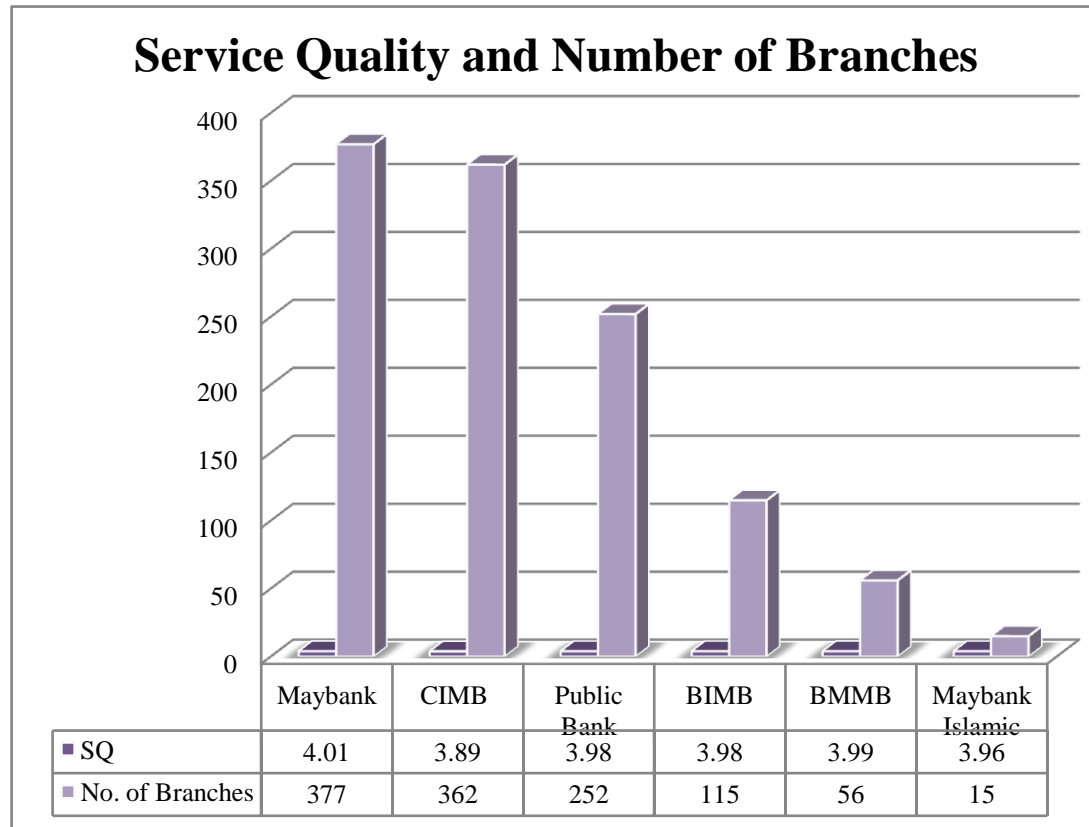
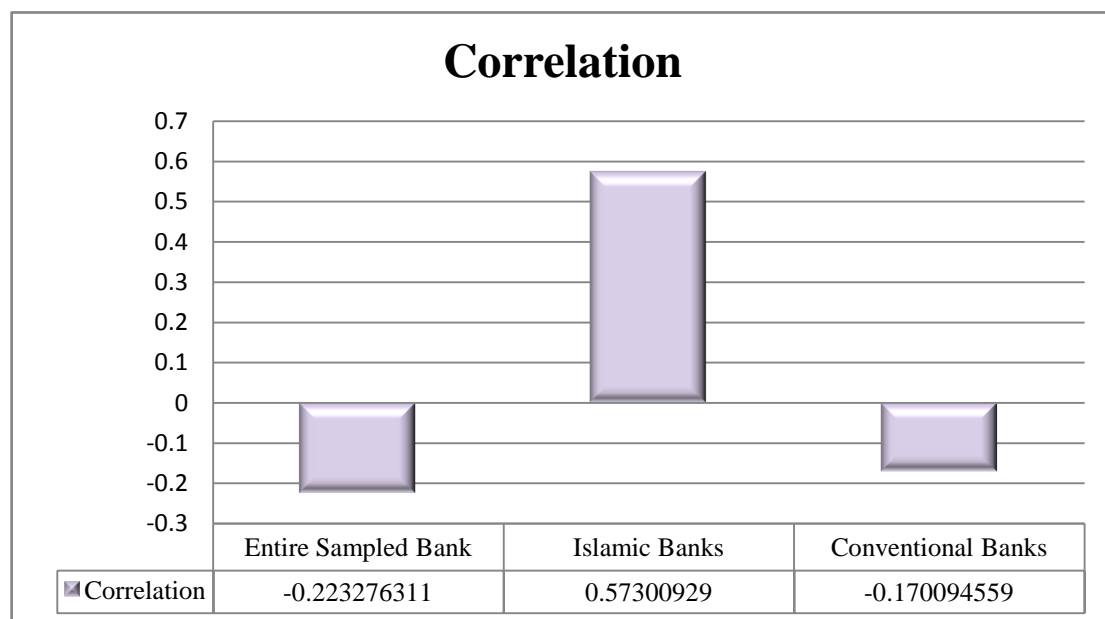


Table 9.9 shows the number of branches and the service quality score for the entire sampled banks. The highest number of branch is by Maybank (377 branches), followed by CIMB (362 branches), Public Bank (252 branches), BIMB (115 branches), BMMB (56 branches) and the lowest number of branch is by Maybank Islamic (15 branches). On the other hand, Maybank also has the highest score for service quality (4.01), followed by BMMB (3.99), BIMB (3.98), Public Bank (3.98), Maybank Islamic (3.96) and the least score for service quality is by CIMB (3.89). In order to identify the relationship between the horizontal diffusion of the banks and their service quality score, a correlation analysis is conducted. Based on the estimations on Table 9.9 and Figure 9.7, the correlation results are depicted in Table 9.10 and Figure 9.8.

**Table 9.10: Correlation Coefficient for Service Quality and Number of Branches of the Sampled Banks**

	Correlation Coefficient
Entire Sampled Banks	-0.22328
Islamic Banks	0.573009
Conventional Banks	-0.17009

**Figure 9.8: The Correlation Estimates between Service Quality and Number of Branches of the Sampled Banks**



The results in Table 9.10 and Figure 9.8 evidences that there is a different degree of correlation between the banks' horizontal diffusion and its service quality score. The highest correlation is for the sampled Islamic banks (57%), which is regarded as medium correlation, implying a modest correlation between service quality score and the bank branch number. Thus, the assumption is only validated with a modest degree of correlation in the case of Islamic banks. However, it can be argued with caution that in the case of Islamic banks, the higher the branch size, and the higher is the perceived service quality score. As part of the caution, religious bias should also be taken into account. As for the conventional banks, the correlation for the conventional banks category, however, has a weak, but importantly a negative relationships. This

implies that service quality deteriorates with the horizontal diffusion of conventional banks with the given data; as suggested by the correlation scores, the higher the branch size, the lower the perceived service quality score. In such an interpretation also caution should be taken, as the correlation coefficient is very small and limited only with three conventional banks.

In conclusion, the findings of the study present that there is no perfect correlation between the service quality performance (SQ) of the Malaysian banks as a whole and their horizontal diffusion. Likewise, consistent results were achieved for the analyses of Islamic and conventional banks, which were carried out individually. Hence, the null hypothesis is accepted and it can be concluded that there is no strong correlation between the horizontal diffusion and the service quality performance for all three categories of banks (the entire sampled banks, the sampled Islamic banks and the sampled conventional banks).

## **9.8 SUMMARY AND CONCLUSION**

This chapter provides an interpretative discussion and analysis based on the extensive analyses conducted in Chapters 6 to 8 within the theoretical framework established in the earlier chapters. The results are used to test the hypotheses that were developed in the research methodology chapter. Table 9.9 outlines all the results of all the main hypotheses together with the decisions for a snapshot reference of the hypothesis testing results. Derived from the decisions of the hypotheses in the table, the following main findings and conclusions were extracted:

- (i) The majority of Islamic banks' customers do not have a good level of awareness and knowledge of the banking services and products offered by their banks;
- (ii) The majority of conventional banks' customers have a good level of awareness and knowledge of the banking services and products offered by their banks;
- (iii) The finding from the banking patronage reveals that respondents from higher education level *i.e.* postgraduate holder and those who have longer banking relationship duration (more than 5 years) to be more concerned about the 'Religious Obligation' when patronising the Islamic banks although the other factors such as customer service and financial related factors are deemed important to them;



- (iv) The factor analysis on the banking selection criteria shows that the respondents ranked 'Services Oriented Factors' as the most important factor to patronise a bank followed by 'Financial Oriented Factors', and 'Marketing Oriented Factors' as second and third respectively;
- (v) The results show that there is a significant difference between customers' expectations and their perceptions on service quality dimensions. The findings produced negative gaps (perception minus expectation), which implies that the service quality received by the customers were below satisfactorily;
- (vi) The findings from overall analyses results show that for Malaysian banks as a whole, 'Tangible' and 'Reliability' dimensions has a direct positive relationship with customers' satisfaction for the expectation based service quality, while 'Tangible', 'Assurance' and 'Social Responsibility' dimensions has a direct positive relationship for the perception based service quality.
- (vii) As for the results of Islamic banks only, the findings reveal that 'Tangible' and 'Islamic Values' dimensions have a direct positive relationship with customers' satisfaction for the expectation based service quality while for the perception based service quality the significant dimensions are 'Empathy', 'Tangible' and 'Islamic Values';
- (viii) As regards to conventional banks only, 'Tangible' and 'Assurance' dimensions had a direct positive relationship with customers' satisfaction for both categories *i.e.* the expectation and the perception based service quality;
- (ix) The results of the study show that there was no strong correlation between service quality performance (mean score of service quality and customers' satisfaction) of the Malaysian banks and their financial performance (score of ROA and ROE). Similar results were obtained for the analyses of Islamic and conventional banks, which were performed separately.
- (x) The results of the study show that there was no strong correlation between service quality performance (SQ) of the Malaysian banks and their horizontal diffusion (number of branches). Similar results were obtained for the analyses of Islamic and conventional banks, which were performed separately.

**Table 9.11: Main Hypotheses and the Decisions**

<b>Hypothesis</b>	<b>Decision</b>
Hypothesis 1: The majority of Malaysian Islamic banks' customers do have a fair level of familiarity with products and services of Islamic banks.	Null Hypothesis Rejected
Hypothesis 2: The majority of Malaysian conventional banks' customers do have a fair level of familiarity of products and services offered by the banks.	Null Hypothesis Accepted
Hypothesis 3: Malaysian Islamic banks' customers apply higher importance to the 'Religious Obligation' factor than other banking selection criteria when deciding to open an account with Islamic banks.	Null Hypothesis Accepted
Hypothesis 4: Malaysian banks' customers apply equal importance to the customer service quality factor along with other banking selection criteria when deciding to open an account with a bank in Malaysia.	Null Hypothesis Accepted
Hypothesis 5: Malaysian banks' customers apply equal importance in terms of their opinion of the expectation and perception of service quality dimensions in overall Malaysian banking.	Null Hypothesis Rejected
Hypothesis 6: There is a significant relationship between customers' satisfaction and the service quality dimensions for expectation based service quality for the entire sample.	Null Hypothesis Accepted
H <sub>6-1</sub> : There are no statistically significant relationships between the customers' satisfaction and the 'Islamic Values' dimension for expectation based service quality.	Null Hypothesis Accepted
H <sub>6-2</sub> : There are no statistically significant relationships between the customers' satisfaction and the 'Assurance' dimension for expectation based service quality.	Null Hypothesis Accepted
H <sub>6-3</sub> : There are no statistically significant relationships between the customers' satisfaction and the 'Responsiveness' dimension for expectation based service quality.	Null Hypothesis Accepted
H <sub>6-4</sub> : There are no statistically significant relationships between the customers' satisfaction and the 'Tangible' dimension for expectation based service quality.	Null Hypothesis Rejected
H <sub>6-5</sub> : There are no statistically significant relationships between the customers' satisfaction and the 'Empathy' dimension for expectation based service quality.	Null Hypothesis Accepted
H <sub>6-6</sub> : There are no statistically significant relationships between the customers' satisfaction and the 'Reliability' dimension for expectation based service quality.	Null Hypothesis Rejected

H <sub>6-7</sub> : There are no statistically significant relationships between the customers' satisfaction and the 'Social Responsibility' dimension for expectation based service quality.	Null Hypothesis Accepted
Hypothesis 7: There is a significant relationship between customers' satisfaction and the service quality dimensions for perception based service quality for the entire sample.	Null Hypothesis Accepted
H <sub>7-1</sub> : There are no statistically significant relationships between the customers' satisfaction and the 'Islamic Values' dimension for perception based service quality.	Null Hypothesis Accepted
H <sub>7-2</sub> : There are no statistically significant relationships between the customers' satisfaction and the 'Assurance' dimension for perception based service quality.	Null Hypothesis Rejected
H <sub>7-3</sub> : There are no statistically significant relationships between the customers' satisfaction and the 'Responsiveness' dimension for perception based service quality.	Null Hypothesis Accepted
H <sub>7-4</sub> : There are no statistically significant relationships between the customers' satisfaction and the 'Tangible' dimension for perception based service quality.	Null Hypothesis Rejected
H <sub>7-5</sub> : There are no statistically significant relationships between the customers' satisfaction and the 'Empathy' dimension for perception based service quality.	Null Hypothesis Accepted
H <sub>7-6</sub> : There are no statistically significant relationships between the customers' satisfaction and the 'Reliability' dimension for perception based service quality.	Null Hypothesis Accepted
H <sub>7-7</sub> : There are no statistically significant relationships between the customers' satisfaction and the 'Social Responsibility' dimension for perception based service quality.	Null Hypothesis Rejected
Hypothesis 8: There is a significant relationship between customers' satisfaction and the service quality dimensions of Islamic banks.	Null Hypothesis Accepted
H <sub>8-1</sub> : There are no statistically significant relationships between the customers' satisfaction and the service quality dimension of Islamic banks for expectation based service quality.	Null Hypothesis Rejected for 'Tangible' and 'Islamic values'  Null Hypothesis Accepted for 'Assurance', 'Responsiveness', 'Empathy', 'Reliability', and

	‘Social responsibility’
H <sub>8-2</sub> : There are no statistically significant relationships between the customers’ satisfaction and the service quality dimension of Islamic banks for perception based service quality.	Null Hypothesis Rejected for ‘Empathy’, ‘Tangible’ and ‘Islamic values’  Null Hypothesis Accepted for ‘Assurance’, ‘Responsiveness’, ‘Reliability’, and ‘Social responsibility’
Hypothesis 9: There is a significant relationship between customers’ satisfaction and the service quality dimensions of conventional banks.	Null Hypothesis Accepted
H <sub>9-1</sub> : There are no statistically significant relationships between the customers’ satisfaction and the service quality dimension of conventional banks for expectation based service quality.	Null Hypothesis Rejected for ‘Tangible’ and ‘Assurance’  Null Hypothesis Accepted for ‘Responsiveness’, ‘Empathy’, ‘Reliability’, and ‘Social responsibility’
H <sub>9-2</sub> : There are no statistically significant relationships between the customers’ satisfaction and the service quality dimension of conventional banks for perception based service quality.	Null Hypothesis Rejected for ‘Tangible’ and ‘Assurance’  Null Hypothesis Accepted for ‘Responsiveness’, ‘Empathy’, ‘Reliability’, and ‘Social responsibility’
Hypothesis 10: There is no correlation between the service quality performance and the financial performance in the sampled banks.	Null Hypothesis Accepted
H <sub>10-1</sub> : There is no correlation between the service quality performance and the financial performance in the sampled Islamic banks.	Null Hypothesis Accepted

H <sub>10-2</sub> : There is no correlation between the service quality performance and the financial performance in the sampled conventional banks.	Null Hypothesis Accepted
Hypothesis 11: There is no relationship between horizontal diffusion of the entire banks and their service quality score.	Null Hypothesis Accepted
H <sub>11-1</sub> : There is no relationship between horizontal diffusion of the Islamic banks and their service quality score.	Null Hypothesis Accepted
H <sub>11-2</sub> : There is no relationship between horizontal diffusion of the conventional banks and their service quality score.	Null Hypothesis Accepted

# Chapter 10

## Conclusion

### 10.1 INTRODUCTION

This study aimed to explore the perceived service quality of Islamic and conventional banks in Malaysia. In meeting this purpose, the expectations and perceptions of the banks' customers were assembled through questionnaire survey. The data collected through survey were analysed and a comparative analysis is rendered in the previous empirical chapters, which also considered other empirical studies from the related literature. This chapter briefly reiterates the significant conclusions derived from the findings. In addition, the chapter presents the key implications and practical recommendations to enhance the service quality of Islamic and conventional banks in Malaysia. It also highlights the research limitations and offers suggestions for the future research.

### 10.2 REFLECTING ON THE FINDINGS OF THE RESEARCH

Service quality has become key strategy in every organisations as they strive for a competitive advantage. In fact, the customers are more demanding about quality now, especially in the financial institutions. Therefore, in resolving the potential worries, many pertinent studies have suggested that banking services should implement appropriate measures to enhance their service quality offered to their customers in order to compete in the current challenging market environment. In addition, knowing what customers want and satisfying their needs are essential to survive in the current market. Furthermore, it is important to see the service quality management in Malaysian banking, which has a dual banking system as the Islamic banks operate side by side the conventional banks.

The main distinguishing characteristic of Islamic banking, as compared to the conventional finance, is the prohibition of payment and receipt of *riba* (usury/interest). This imposes further expectations from Islamic banks in terms of compliance with Islamic values.

Being comparatively new institutions, Islamic banks have to prove themselves in the eyes of public in terms of their services beyond the religious patronage factor. In order to establish well in the financial system and everyday financing needs of the larger public, it is crucial for Islamic banks to have an excellent service quality as most studies have considered service quality an essential strategy for the success and survival of an institution. Besides that, service quality will help Islamic banks to cope with strong competitions from conventional banks but also arrival of new Islamic banks to the market. As elaborated in Chapter 3, the need for an excellent service quality is important for Islamic banks to reflect the Islamic values in banking transactions and to ensure higher customers satisfaction thereby to improve customer loyalty. Nonetheless, it is uncertain that the level of service quality of Malaysian banks fulfils the needs and requirements of their customers. Hence, this research attempted to fill this observed gap by investigating the level of awareness, expectations, perceptions and attitudes of the customers towards the service quality of Malaysian banks.

As discussed in Chapter 2, the theoretical framework of this research is based on Parasuraman *et al.*'s (1985, 1988, and 1991) service quality (SERVQUAL) model, which is utilised as the main method to gauge the expectations and perceptions of customers towards service quality of Islamic and conventional banks in Malaysia. The literature related to service quality for Islamic banking identifies that CARTER model (Othman and Owen, 2005) is the most well known model to measure service quality of Islamic banks. It is adapted SERVQUAL dimensions and added another dimension, which is named as 'compliance to Islamic law' to upgrade the model to be applicable to Islamic banks.

Thus, based on the review of literature on Islamic banking, Islamic banks' performance and their service quality, this study adapted the SERVQUAL and CARTER model with 7 dimensions in total. The modified SERVQUAL included 5 dimensions from the original SERVQUAL model ('Assurance', 'Responsiveness', 'Tangible', 'Empathy' and 'Reliability') and added two new dimensions: 'Islamic Values' and 'Social Responsibility' dimensions. Accordingly, a questionnaire survey method, which contained the variables from the modified SERVQUAL to measure the service quality of Malaysian banks in perceived and expected level, was used. The

study presented empirical evidence based on the survey carried out among the customers sampled from 14 Islamic banks and 17 conventional banks in Malaysia.

The initial descriptive analysis of customers' familiarity with Malaysian banking products and services revealed that customers have high level of knowledge and awareness with conventional banking services such as saving account, current account, credit card, home loan and leasing. On the other hand, they have less knowledgeable and are lack the awareness of the Islamic banking products and services such as *bai' al-dayn*, *bai' al-inah*, *bai' al-salam*, *tawarruq*, *istisna'* and *sukuk*. The findings are consistent with other studies which found that the lack of knowledge about Islamic banking products and services has raised a concern, since customers' familiarity with the banking products and services has an impact on shaping the perception of service quality. The findings show that from 20 types of products and services offered by Islamic banks, only 3 products (*wadiah*, *rahnu* and *mudharabah*) are known by about 60% of the respondents, while the remaining 17 products and services scored less than 41%. On the other hand, the products and services offered by conventional banks that are ranked the highest 3 out of 22 are saving account, credit card services and vehicle financing (scores ranging from 85% to 98.7%). Whereas the products and services that are less known by the respondents are bond, leasing, trustee service, and import and export (scores ranging from 19.8% to 36.6%). If the level of knowledge and awareness of the products and services among the customers can be enhanced, the products and services arguably are able to improve customers' satisfaction via better service quality offered by these banks.

This study also investigates the patronage factors that influence customers to open an account with a bank which include: 'Religious Obligation', 'Courteous and Competent', 'Customer Service Quality', 'Location', 'Convenience', 'Internet Banking', 'Brand and Image', 'Attractive Price of Products and Services', 'Rate of Return', 'Number of Branch Available' and 'Encouragement from Family and Friends'. The empirical findings further show that the religiosity aspect is an assertive factor that has induced the sampled customers to hold an Islamic bank account as the findings from this study showed that the top three significant patronage factors are 'Religious Obligation' (mean score: 4.57), 'Courteous and Competent Personnel' (mean score: 4.48) and 'Customer Service Quality' (mean score: 4.46).



The analysis on patronage factors was further extended using the factor analysis in order to determine the main factors that influence the customers to open an Islamic banking account. Factor analysis is considered to be the most appropriate approach because of its ability to reduce a huge number of related variables to a more controllable number. The findings suggest that there are four major components: 'Religious obligation and Image Factor', 'Service Oriented Factors', 'Financial Oriented Factors and Marketing Oriented Factors'. Based on the ranking, the empirical analysis revealed that religiosity factor was ranked first according to the highest mean value. Consequently, these findings suggest that besides the religious obligations, the respondents also perceived that good customer services and better financial returns are also crucial factors in selecting a bank.

It can, therefore, be concluded that most of the customers of Islamic banks are generally interested in the Islamic traits, as religiosity factor was ranked first, which inspire them to select an Islamic bank. They are, however, still incapable to grasp and acknowledge the basic principles of the Islamic banking system. This can be evidenced from the low level of familiarity with the Islamic banking products and services as mentioned earlier in this section. Furthermore, the support from the government, continuous trainings and lessons on Islamic banking and finance, and public awareness programmes are still the fundamental factors that will govern the sustainability of the Islamic banking system in the future.

The finding on the expectation and perception of customers on service quality of overall Malaysian banks revealed that the highest mean ranking for the expectation based service quality is 'Reliability' dimension followed by 'Responsiveness', 'Assurance', 'Islamic Values', 'Social Responsibility', 'Empathy', and 'Tangible'. On the other hand, the highest ranking for the perception based service quality is also 'Reliability' dimension followed by 'Assurance', 'Tangible', 'Islamic Values', 'Social Responsibility', 'Responsiveness' and 'Empathy'.

The study furthered classified the average mean into Islamic banks only and conventional banks only to identify whether there are any significant difference with the results of the average mean for the banks as a whole. For the expectation part, the 'Reliability' dimension scored the highest average mean for both categories (Islamic banks and conventional banks) while the lowest average mean score for both type of

banks was the 'Tangible' dimension. On the other hand, the 'Assurance' dimension scored the highest average mean in the perception part of Islamic banks, while 'Reliability' dimension scored the highest in the perception analysis related to conventional banks. In contrast, the lowest score of average mean for the perception of Islamic and conventional banks was the 'Empathy' dimension.

In addition, this study investigates the gap analysis (differences between perception and expectation) for service quality of Malaysian banks. It is worthwhile to note that from the results of the survey, all the gap values (perception minus expectation) are negative. The finding suggests that the service quality performance in Malaysian banks is below expectations (obtaining a negative score) and leads to a perception of low service quality.

The result for overall Malaysian banks shows that the highest negative score was -0.76 which was for the statement 'employees of the bank will give customers prompt service' (from 'Responsive' dimension). On the other hand, the statement 'the bank has visually appealing interior design' recorded the lowest negative score at -0.14. In addition, this statement was from the 'Tangible' dimension.

A further analysis was carried out separately for the Islamic banks and conventional banks to identify whether there was a difference on the mean gap between these banks. The highest negative score for Islamic banks (-0.73) and conventional banks (-0.78) was for the statement 'employees of the bank will give customers prompt service' (from 'Responsive' dimension). On the contrary, the lowest negative score for Islamic (-0.19) and conventional banks (-0.09) was for the statement 'the bank has visually appealing interior design' (from 'Tangible' dimension).

In an attempt to develop results and enrich existing literature, this study expanded the analysis on customers' expectation and perception of service quality with factor analysis for the service quality dimensions. This exploratory analysis is used to load the SERVQUAL dimensions and assess their importance. The results from the factor analysis showed that the loading factor values for the items were above 0.50 and that these findings were significant. In addition, this study extended the analysis to locate the newly generated constructs of the dimensions using the Principle Component Analysis (PCA), which is used to reduce the items to some composite scores and identify the new appropriate factors. The findings of this analysis showed that for

expectation based service quality, the variables are effectively inserted into 4 main components; 'Operational Service', 'Social and Islamic Values', 'Internal Services', and 'Appearance'. On the other hand, the results for the perception based service quality showed that all available variables are effectively inserted into 2 main components; 'Social and Islamic Values'; and 'Operational and Internal Services'.

The study also extended the factor analysis for the Islamic banks and conventional banks separately. The new generated components for expectation of service quality of the Islamic banks are: 'Operational Services'; 'Social and Islamic Values'; 'Internal Services'; and 'Appearances'. On the other hand, the new generated components for perception of service quality of Islamic banks are: 'Operational and Internal Services'; and 'Social and Islamic Values'. The same procedure was followed for the conventional banks in Malaysia. As a result, the new generated components for expectation of service quality of the conventional banks are: 'Operational Services'; 'Social and Internal Services'; and 'Appearances'. On the contrary, the new generated components for perception of service quality of conventional banks are: 'Social and Internal Services'; and 'Appearances and Operational Services'. The findings of this study, thus, can facilitate Malaysian banks in identifying the important dimensions of service quality in order to design a clear strategy to develop the concept of service quality. Furthermore, the results from the gap analysis clearly show that Malaysian banks need to bridge the customers' expectations with the perceptions. This can be done by identifying the customers' needs and meeting or exceeding their requirements. This step is crucially important as fulfilling customers' satisfaction can lead to customers' loyalty that will affect the sustainability of the banks.

In furthering the analysis, this study also analysed the relationship between service quality and customers' satisfaction, for which the literature argues that there is a positive relationship. The results from the descriptive analysis found that most of the respondents were satisfied with the service quality of their current bank with a mean of 3.91 out of a 5 point Likert scales. For overall Malaysian banks, only 14.5% of the respondents were either 'I do not care'/'Not satisfied'/'Not satisfied at all', while the majority of the respondents, (85.5%) were either 'Satisfied' or 'Very satisfied'.

The study also extended the analysis for the Islamic banks and conventional banks separately. The combination of 'Satisfied' and 'Very satisfied' categories show a total

of 83.9% (Islamic banks) and 87.2% (conventional banks) of the total population for each type of the banks. Although the majority of the respondents were satisfied with the service quality of their banks, the results showed that the conventional banks have higher percentage in terms of customers' satisfaction than the Islamic banks. Nevertheless, a total of 16% from the respondents of Islamic banks were in the category of 'I do not care', 'Not satisfied' and 'Not satisfied at all'. This percentage was higher than the percentage of the respondents of conventional banks which was only 12.8% for the same category. Thus, the findings validated that majority of the customers of Malaysian banks were satisfied with their bank.

This study also extends the analysis to determine the relationship between the SERVQUAL dimensions and customer satisfaction, using the Stepwise Multiple Regression Analysis. The study found that for Malaysian banks as a whole, from the expectation based service quality, two dimensions had a direct positive effect on customers' satisfaction: 'Tangible' and 'Reliability', while the remaining five dimensions: 'Assurance', 'Responsiveness', 'Empathy', 'Islamic Values' and 'Social Responsibility' were not significant. On the other hand, from the perception based service quality, three dimensions had a direct positive impact on customers' satisfaction: 'Tangible', 'Assurance', and 'Social Responsibility'. The remaining four dimensions: 'Responsiveness', 'Islamic Values', 'Reliability', and 'Empathy' were found to be insignificant.

The analysis was separately repeated with the Islamic banks and conventional banks. The study found that for the Islamic banks' expectation based service quality, two dimensions had a direct positive effect on customers' satisfaction: 'Tangible' and 'Islamic Values', while the remaining five dimensions: 'Assurance', 'Responsiveness', 'Empathy', 'Reliability' and 'Social Responsibility' were not significant. While for the perception based service quality, three dimensions had a direct positive impact on customers' satisfaction: 'Empathy', 'Tangible', and 'Islamic Values'. The remaining four dimensions: 'Responsiveness', 'Social Responsibility', 'Reliability', and 'Assurance' were found to be insignificant.

As expected earlier, the 'Islamic Values' dimension is considered as important dimension by the respondents of the Islamic banks. The findings of this study validated that 'Islamic Values' had a direct positive effect on customers' satisfaction.

In other words, Islamic banks can increase the customers' satisfaction by improving their services related to the 'Islamic Values' such as provide banking products and services according to Islamic *Shari'ah*; have a well-known and trustworthy *Shari'ah* Advisory Board; and neither pays nor take interest. The result is congruence with the finding of the banking selection criteria which denoted that respondents of Islamic banks perceived 'Islamic Values' as the most important criterion in banking selection criteria.

With regards to the conventional banks, the findings of the study revealed that for both the expectation and perception based service quality, two dimensions had a direct positive effect on customers' satisfaction: 'Tangible' and 'Assurance', while the remaining five dimensions: 'Islamic Values', 'Responsiveness', 'Empathy', 'Reliability' and 'Social Responsibility' were not significant.

To summarise, the results found that the 'Tangible' dimension was the most important dimension in service quality that had a significant relationship with customers' satisfaction in all three categories (Malaysian banks as a whole, Islamic banks and conventional banks). This could be due to customers' appreciation of the banks' physical appearances, the equipments (technologies) and facilities provided, and the pleasant appearance of the banks' employees.

It can be concluded that customers of Malaysian banks will be satisfied with the quality of the service depending on their bank's presentations of the various types of facilities and services such as equipment, appearance of the personnel, and the means of contact used by the bank. Furthermore, the customers will also be satisfied if the bank is able to fulfil its promises of efficiency such as delivering the service with empathy, promptly and accurately. In addition, another significant factor that affects the customers' satisfaction is whether the bank is able to offer assurance and confidentiality through a credibility and effective communication. Furthermore, the religiosity factor is also important for Islamic banks to satisfy their customers' needs. Finally, the banks will have satisfied customers if they are also socially responsible.

### **10.3 RESEARCH IMPLICATIONS AND RECOMMENDATIONS**

This research attempts to explore the service quality in Islamic and conventional banks in Malaysia and the empirical analyses presented may have positive

implications and recommendations for various related parties. In addition, this research contributes to the existing literature in terms of crystallizing the theory of service quality in the banking industry. It also provides valuable findings to guide the industry practitioners to enhance and improve their current practices related to service quality. The findings may be very useful to promote business growth from the perspective of marketing strategy. Accordingly, this section briefly reviews the implications of this study towards the following aspects:

### **10.3.1 Implications for Knowledge**

This study adds further value to the existing literature in the area of service quality and Islamic banking. First, the primary contribution of this research is that it offers a constructive understanding of service quality in general, and service quality from an Islamic perspective in particular. This effort is crucially essential since the concept of quality or *itqan* is deeply inscribed in Islam, and thus should be implanted in all *Shari'ah* oriented institutions especially Islamic banks. Secondly, this study offers an extensive survey on service quality of Islamic and conventional banks in order to provide empirical evidence that reflect the actual practice of service quality in the Malaysian banking market.

This study departs from previous related studies in that the previous researches have had the limitation of focusing exclusively on either the customers of Islamic banks or the customers of conventional banks. The current study, therefore, provides a much broader sampling frame comprising of 14 Islamic and 17 conventional banks in Malaysia. Furthermore, this study also utilised various statistical tools to obtain important results that have clarified the research objectives. Thirdly, this study proves that customers' awareness and knowledge play a crucial role in forming the perception of quality service offered by the banks. Lastly, this study also confirms the findings of previous studies that 'Religious Obligation' is an important bank selection factor for Muslims to patronage an Islamic bank in Malaysia. However, as the customer satisfaction analysis indicates this is not sufficient condition for customer satisfaction.

### **10.3.2 Implications for Customers of Islamic and Conventional Banks**

The theoretical perspectives always highlight that the customers of the Islamic or conventional banks are more satisfied if their banks perform better in terms of service quality. The empirical results in this study show that customers regard the 'Reliability' dimension as the most important dimension in the customers' expectations and perceptions of service quality. 'Reliability' is related to banks' ability to fulfil promises of efficiency and always provide the similar level of quality of service or perform the service accurately.

As a result, this study acts as an informant, especially for Islamic banks that have been subjected to criticism in having poor service quality, where the findings can be used to show that there is not much difference between service quality gap mean scores (perception minus expectation) related to Islamic and conventional banks (see Table 7.21 and Table 7.22, in Chapter 7). Hence, if the service quality practice is improved, coupled with sufficient clarification by the staff of Islamic and conventional banks, customers can benefit from not only the better service quality, but also become capable of understanding the financial information prepared by the banks.

### **10.3.3 Implications for Professional Islamic Bankers and Financiers**

Drawing from the positive response of the empirical findings of this study, Islamic and conventional banks should improve their service quality policies in order to reap their potentials as a strategic means to achieve a competitive advantage. Among the significant benefits of service quality include customer satisfaction and loyalty; increase profitability; improves image and values; and fan positive word-of-mouth advertising. In this respect, an integration of service quality in satisfying customers' expectations deserves maximum deliberations. Another essential aspect is to strategically market such initiatives through vigorous publicity in order to serve as an effective tool to attract prospective customers.

This study can be used by the Islamic and conventional banks to develop an understanding in relation to their customers' demand. In addition, by examining the customers' expectation and perception of service quality, Islamic and conventional banks will be more informed about the service quality dimensions that need to be improved in order to appeal to customers. An understanding of customers' perception

of service quality and fulfilling their expectation are essential in developing, structuring and improving service quality programmes in the Malaysian banking system. Among the steps that can improve the service quality programmes are designing service quality goals that are customers-oriented; identifying the service quality recovery manuals and procedure; creating service quality training programmes for the employees; and designing efficient rewards system to promote better service quality.

Despite Malaysia's eagerness to be the hub of Islamic banking and finance, the findings in this study also reveal that most of the respondents have less awareness and knowledge about most of the available Islamic banking products and services. Hence, the employees of Islamic banks need to play a more effective role in enlightening the customers on the unique features of *Shari'ah* compliance products and services. Islamic banks should also take the necessary corrective measures to enhance the level of awareness and knowledge of the customers by carrying out their responsibility in the education process too. Another possible way is to use mass media to educate the public via newspapers, television, radio or internet websites. Furthermore, the banks can hold free public lectures, workshops or seminars on Islamic banking services and products to public, schools and universities. Consecutively, the increase in the level of awareness and knowledge about Islamic banks' products and services will benefit the banks in the long-term.

It should be noted that the integration of service quality management in Malaysian banks provides new prospects for marketing strategy. However, it will be a challenge for Malaysian banks' managers to maintain an equilibrium between the costs of service improvement with the service quality issues concerned by the banks' customers. On the other hand, an affirmation that such marketing initiative (better service quality) is feasible and sustainable in the long term is established by the increasing demand from the customers for the service quality enhancement in the Malaysian banks.

#### **10.3.4 Implications for Regulators and Policy Makers**

The regulators should expand the scope in deliberating other means to complement the existing regulatory procedures in order to safeguard the customers of the banking institutions. Research has shown that service quality could be used as one of the



marketing strategies for the banks if they are implemented properly. For regulators and policy makers, this study suggests the importance of service quality training programmes to educate the banks' staffs about service quality standards and best practices. This includes providing framework and guidelines for Islamic and conventional banks in Malaysia on best service quality practices to pursue. These programmes could promote a better understanding among the staffs of the banking institutions of why service quality is important and how it can benefit the banks and their customers. Nevertheless, the findings in this study, in relation to regulators, also indicate that the customers are really in need for product knowledge especially the Islamic banking products. It is argued that the lack of knowledge of specific Islamic products is part attributable to the Arabic vocabulary used to name the Islamic financial products. In addition, there are no formal educational initiatives had been initiated by the government or financial institutions to cater for this problem. Therefore, the regulators including the *Shari'ah* scholars, should take necessary initiatives in promoting the learning process.

The regulators also need to draw proper regulations that require banks' employees to be well equipped with the necessary knowledge and skills concerning banking and finance, coupled with regulations concerning the market conduct in order to protect the interest of the customers. The initiatives of promoting the correct implementation of service quality can be seen as costly, as the banks need to make quite a substantial investment in order to improve the management information system, and also the development of human resources in the service quality team. It is, therefore, recommended that the government should play a role in facilitating the process. Thus, by promoting the correct implementations of service quality in the practice, the regulators and policy makers can be seen as serious in implementing the proper way of service quality practice.

#### **10.4 LIMITATIONS OF THE STUDY**

Although the effort to establish a detailed explorative study on service quality of Malaysian banks from the conceptual and empirical level in this study is successful and offer significant results, the research is not without its limitations. First and foremost, this research encountered the limitation of seeking out the most suitable respondents, *i.e.* the customers of Islamic and conventional banks. In the ideal

situation, the respondents for this study should be the customers from all banks in Malaysia either Islamic or conventional banks in order to provide more accurate opinions, perceptions, and attitudes towards the service quality of the banks. However, due to the regulatory restrictions on banking secrecy imposed on banking institutions over the customers' detailed information, the researcher could only sample the general customers without knowing which type of bank they are with. Conversely, considering the various constrictions of the respondents where customers' details are to remain confidential, this study provides substantial information for various interested parties.

Secondly, the findings of the study may not be generalised to the general population due to the use of convenience sampling. Not everyone was willing to participate in the survey due to various reasons, and therefore random sampling could not be pursued. Moreover, the questionnaire survey utilised in the study was close-ended questions. Although there are great attempt to review the literature in order to ascertain and include all pertinent features to the research, numerous items included in the questionnaire were identified and decided by the researcher. The questionnaire was considered ideal to collect data from a significant number of respondents. In addition, due to the sampling method limitations, which have been highlighted, this study is unable to use more vigorous statistical tests in analysing the data, such as parametric tests, which debatably are more robust. Nevertheless, although the analyses have made important contributions to knowledge in the area of service quality, the findings should be understood from the Malaysian perspective, which may not be necessarily comparable with other countries.

Thirdly, the study has a limited time scope and budgets restriction for collecting the primary data. A limited time of three months was given as the maximum time to conduct the questionnaire survey in Malaysia. It should be noted that the scope of this study has become doubled; as it compares the customers' perceived service quality of Islamic and conventional banks. Furthermore, there was a budget restriction involved in conducting the questionnaire survey. However, taking the wide scope of the study, the method of data collection, the time and budgets constraints into consideration, the study has successfully obtained 941 usable questionnaires out of 1,200 respondents in three months.

Fourthly, also due to the time and costs constraints, this research is limited to the sample from the retail customers within six states of Malaysia (Kuala Lumpur, Selangor, Pahang, Perak, Negeri Sembilan and Melaka). If more time was allocated to increase the sample size from the other states of the country, the study outcomes would be more thorough. Furthermore, the study would be more meaningful if the sample had also included respondents from other Islamic and conventional banks as well, as recently a number of new Islamic banks were established.

Lastly, from the empirical point of view, the survey on expectations and perceptions, related to service quality issues and dimensions focused on investigating retail customers only. Despite the fact that the retail segment of the market was exposed to be more accommodative towards service quality concerns, the corporate customers remains an important segment in the financial market, and more importantly, possesses much significant funds available for savings. However, due to time and budget constraints, the perceptions of corporate customers could not be attempted. It is also important to note that in order to reach corporate customers, the introduction by the banks themselves is essential. However, Malaysian Islamic banks have not developed such transparent culture to facilitate such request due to the regulatory restrictions on banking secrecy imposed on banking institutions (Mohd-Karim, 2010).

## **10.5 SUGGESTIONS FOR FUTURE RESEARCH**

Having mentioned the limitations that were acknowledged and discovered throughout the research process, there are number of ways in which this study could have been conceptualised beyond the contents of the study. This section, therefore, put forward the suggestions and recommendations as to what can be done in the future to enhance or further contribute to the field. The possible areas of expanding the research are discussed as follows:

### **(i) Inclusion of Interviews and Feedback From Customers**

This study did not include interviews and feedback from banks' customers due to the costs and time limitation. Hence, it is also useful to conduct further research using semi-structured interviews in order to triangulate comprehensively. The limited qualitative research is likely to affect the quality of construct items, and therefore the research findings. Adding another primary data such as interviews would be very

meaningful and enlightening for the study in pinpointing various aspects and dimensions through open discussion with the participants.

**(ii) More Studies of Other Banks' Consumers Elsewhere**

The current study is limited to a single market, which is Malaysia and the results of the study are based on the customers' perception of Malaysian banks. The Malaysian banking system is based on a dual banking system, Islamic and conventional banks working side by side. Therefore, future research which expands the sample to other countries could generate more definite insights and would be helpful in cross-validating the findings with regards to Islamic and conventional banks or comparison of both banks.

**(iii) Study on Employees Perception of the Banks' Service Quality.**

Although this study found that the level of service quality perceived by the bank customers are below satisfactory level, it will be interesting to study the perception of the banks' employees on the banks' service quality as being the suppliers of the service. This can help to locate whether there is a difference across the perception between the banks' customers and the banks' employees regarding the service quality problems and their impact on quality. Hence, a further study on the employees' perceptions of the banks' service quality would provide a useful insight from another perspective (from the employees' point of views).

**(iv) Research Focusing on Relative Impact of Expected Service Quality**

Although this study found that the crucial component of perceived service quality is the expected service quality, study on what factor influence the expected service quality such as seller's communications, marketing advertisements, personal desires and previous experience will have useful managerial consequences. Thus, it is also worthwhile to ascertain the most significant service quality dimension for its target markets and to compare itself to the competition in terms of strength and weaknesses on these particular dimensions. Therefore, a focused and detailed study on relative impact of expected service quality will certainly have an indication of what its primacy should be with regard to service quality.

**(v) Inclusion of Time-series Data or Secondary Data**

Future research may also want to consider undertaking a detailed simultaneous time-series data analysis in addition to the survey questionnaire in order to look intently at the effect of service quality to the bank's financial performance, *i.e.* using Data Envelopment Analysis or Stochastic Frontier Analysis. The time-series data analysis may be narrowed down to be in line with the survey target respondents; for example, in such a research, the time-series data should be from the annual financial report for the retail banking. Thus, further analysis using the time-series data would provide strong evidence for the relationship between service quality and the banks' financial performance.

**(vi) Inclusion of Longitudinal Data**

While this study constructed as cross-sectional data design, it could be considered to repeat the same questionnaire over the years to identify the dynamics of change in participants' perceptions and expectations. For example, repeating the same questionnaire every two years would help to accumulate important data to compare how the service quality in the banks will have changed but also how the customers' expectations and perceptions of the received service will have changed. In a longitudinal manner, this would be an important contribution, which could be designed as a research project to raise funding, as it would be an expensive exercise.

## **10.6 EPILOGUE**

This study aimed at studying the expectations and perceptions of banks' customers in the case of Malaysian Islamic and conventional banks. In line with the development of Islamic banking industry, it is important to study and explore the various aspects of the service quality issues in Islamic banks and to compare the results with the conventional ones in the Malaysian setting.

In order to achieve the aims and objectives identified in the beginning of the research, primary data was collected in Malaysia through questionnaire survey; which gathered the responses of Islamic and conventional banks' customers. The analyses show that the level of service quality in Malaysia is below satisfaction level as evidenced by the negative score from the gap analysis.

In concluding, hence, as can be seen in the foundational and empirical chapters, the study has fulfilled its aims and objectives by effectively and efficiently responding to the research questions and testing the hypotheses through a comprehensive analysis. In general, the research has shown significant results on the perceived service quality in Islamic and conventional banks in Malaysia.

## BIBLIOGRAPHY

### BOOKS, JOURNAL ARTICLES, CONFERENCE PAPERS AND ELECTRONIC ARTICLES

- Abdullah, D. V. (2009). Taking Islamic Finance to the Next Level. *Islamic Finance Asia*, 2, 13.
- Abdullah, R. F. S., and Rahman, A. R. A. (2007). "Factors influencing Knowledge of Islamic banking Services: The case of Malaysian bank Managers". *Review of Islamic Economics*, 11(2), 31-54.
- Abdullrahim, N. (2010). *Service Quality of English Islamic Banks*. Unpublished Thesis (Ph.D.). Bournemouth University.
- Abedniya, A., and Zaeim, M.N., (2011). "Measuring the perceive service quality in the Islamic banking system in Malaysia". *International Journal of Business and Social Science*, 2(13), 122-135.
- Abedniya, A., Zaeim, M.N., and Hakimi, B.Y., (2011). "Investigating the relationship between customers' perceived service quality and satisfaction: Islamic bank in Malaysia". *European Journal of Social Sciences*, 21(4), 603-623.
- Ahmad, A., Kashif-ur-Rehman, and Saif, M. I. (2010). "Islamic banking experience of Pakistan: Comparison between Islamic and conventional banks". *International Journal of Business and Management*, 5(2), 137-143.
- Ahmad, N., and Haron, S. (2002). "Perceptions of Malaysian Corporate Customers Towards Islamic banking Products and Services". *International Journal of Islamic Financial Services*, 3(4).
- Ahmed, G. A. (2005). "Measuring risk and profitability for the Islamic financial modes: The experience of Sudanese Islamic Banks". *Review of Islamic Economics*, 9(2), 31-75.
- Al-Adwani, Tahani, Soud (2010). *Exploring Service Quality in the Islamic banking Industry in Kuwait: Analysis of Customer Perceptions*. Unpublished Thesis (Ph.D.). School of Government and International Affairs, (Durham, UK: Durham University).
- Al-Ajmi, J., Hussain, H. A., and Al-Saleh, N. (2009). "Clients of Conventional and Islamic Banks in Bahrain: How They Choose Which Bank to Patronize". *International Journal of Social Economics*, 36(11), 1086-1112.
- Al-Dimasqi, Al-Sheikh Muhammad Jamaludin Al-Qasimi. (2006). *Mawi'zat al-Mukminin Min Ihya Ulum al-Din Li Imam Ghazali*. (Transl).Kuala Lumpur: Darul Fajr, 385-388.

- Al-Eisa, A. S., and Alhemoud, A. M. (2009). "Using a multiple-attribute approach for measuring customer satisfaction with retail banking services in Kuwait". *International Journal of Bank Marketing*, 27(4), 294-314.
- Ali, S. S. (2003). *Financial Distress and Bank Failure: Lessons from Closure of Ihlas Finans in Turkey*. Paper presented at the Internal Seminar of Islamic Research and Training Institute.
- Al-Jarrah, I., and Molyneux, P. (2005). Efficiency in Arabian Banking. In M. Iqbal & R. Wilson (Eds.), *Islamic Perspectives on Wealth Creation* (pp. 97-117): Edinburgh Univ. Press.
- Allred, A. T. (2001). "Employee Evaluations of Service Quality at Banks and Credit Unions". *International Journal of Bank Marketing*, Vol. 19(4), 179-185.
- Al-Zaabi, O. S. H. A. (2006). *Quality Service in UAE*. Unpublished Thesis (Ph.D.). School of Government and International Affairs, (Durham, UK: Durham University).
- Amin, H., Hamid, M. R. A., Lada, S., and Baba, R. (2009). "Cluster Analysis for Bank Customers' Selection of Islamic Mortgages in Eastern Malaysia: An Empirical Investigation". *International Journal of Islamic and Middle Eastern Finance and Management*, 2(3), 213-234.
- Amin, M., and Isa, Z. (2008). "An Examination of the Relationship Between Service Quality Perception and Customer Satisfaction: A SEM Approach Towards Malaysian Islamic Banking". *International Journal of Islamic and Middle Eastern Finance and Management*, 1(3), 191-209.
- Amiri, M. A. R. (2008). Islamic Investment Management: The Way Forward. *Islamic Finance Review*, 17-19.
- Armistead, C. G., Clark, G. and Stanley, P. (1995). Managing Service Recovery. *Managing Service Quality*. Edited by P. Kunst and J. Lemmink, Paul Chapman Publishing Ltd, London, UK, 93-106.
- Asutay, M. (2009). *An Introduction to Islamic Moral Economy*. Paper presented at the Durham Islamic Finance Summer School 2009, School of Government and International Affairs, Durham University, July 2009.
- Asutay, M. (2010). *An Introduction to Islamic Moral Economy*. Paper presented at the Durham Islamic Finance Summer School 2010, School of Government and International Affairs, Durham University, 5-9 July 2010.
- Bader, M. K. I., Shamser, M., Ariff, M., and Hassan, T. (2007). "Cost, Revenue, and Profit Efficiency of Conventional versus Islamic banks: Financial ratios approach". *Review of Islamic Economics*, 11(Special issue), 89-106.
- Badri, M.A., Davis, D., and Davis, D. (1995). "A study of measuring the critical factors of quality management". *International Journal of Quality & Reliability Management*, 12(2) 36-53.



- Beckett, A., Hewer, P., and Howcroft, B. (2000) "An exposition of consumer behaviour in the financial services industry". *International Journal of Bank Marketing*, Vol. 18 (1), 15-26.
- Berk, J. and Berk, S. (2000). Quality management for the technology sector. Butterworth-Heinemann, Woburn.
- Berry, L. L.; Parasuraman, A. and Zeithaml, V. A. (1988). "The Service Quality Puzzle". *Business Horizon* (September-October), 35-43.
- Berry, L. L.; Zeithaml, V. A. & Parasuraman, A. (1985). "Quality Counts in Services, Too". *Business Horizon* (May-June), 44-52.
- Bley, J., and Kuehn, K., (2004). "Conventional Versus Islamic Finance: Student Knowledge and Perception in the United Arab Emirates". *International Journal of Islamic Financial Services*, 5(4).
- Bryman, A. (2004). *Social Research Methods* (Second ed.). New York: Oxford University Press.
- Carman, J. M. (1990). "Consumer Perceptions of Service Quality - an Assessment of the SERVQUAL Dimensions". *Journal of Retailing*, 66(1), 33-55.
- Carrilat, F. A., Jaramillo, F. and Mulki, J. P. (2007). "The validity of the SERVQUAL and SERVPERF scales". *International Journal of Service Industry Management*, Vol.18(5), 472-490.
- Chapra, M. U. (2004). *The Case Against Interest: Is it Compelling?* Paper presented at the International Conference on Islamic Banking and Finance.
- Chapra, M. U. (2008a). "The Global Financial Crisis: Can Islamic Finance Help?". *IIUM Journal of Economics and Management*, 16(2), 118-124.
- Chapra, M. U. (2008b). *The Rationale Behind Islamic Finance*. Paper presented at the Asset-Based and Mortgage-Based Financial Products from an Islamic Perspective, London, UK.
- Chong, B.S., and Liu, M.-H. , (2009). Islamic banking: Interest-free or interest-based? *Pacific-Basin Finance Journal*, 17, 125-144.
- Clement, J. and Selvam, M. (2006). "Service Quality Gaps: A Retro Analysis". *Academic Open Internet Journal*, Vol.18 (7), 1-11.
- Cohen, Louis, Manion, Lawrence and Morrison, Keith. (2007). *Research Methods In Education [Electronic Resource]*. Taylor & Francis Routledge, Accessed on: 1 March 2010, retrived from: Netlibrary database. Available at <http://www.netlibrary.com/Details.aspx>>
- Cooper, D. R., and Schindler, P. S. (2001). *Business Research Methods* (7<sup>th</sup> Edition). McGraw-Hill Book Co.Singapore.

- Cronin, J. J., Brady, M. K. and Hult, G. T. M. (2000). "Assessing the Effects of Quality, Value, and Customer Satisfaction on Consumer Behavioral Intentions in Service Environment". *Journal of Retailing*, Vol.76 (2), 193-218.
- Cronin, J. J. and Taylor, S. A. (1992). "Measuring Service Quality - A Reexamination and Extension". *Journal of Marketing*, Vol.56 (3), 55-68.
- Cronin, J. J. and Taylor, S. A. (1994). "SERVPERF Versus SERVQUAL: Reconciling performance-based and perceptions-minus-expectations measurement of service quality". *Journal of Marketing*, Vol.58, 125-131.
- Cronin, J. J. & Taylor, S. A. (1992). "Measuring Service Quality - a Reexamination and Extension". *Journal of Marketing*, 56(3), 55-68.
- Dale, B. G. (1999). *Managing Quality*. Blackwell Publishers Incorporation, Oxford, UK.
- Damak, M., Volland, E., & Gosrani, N. (2009). Rated Gulf Islamic Financial Institutions and Takaful Companies Have Shown Resilience To Global Market Dislocation, But They Are Not Risk Immune. *STANDARD & POOR'S Islamic Finance Outlook 2009*, 8-12.
- Dawson, C. (2009). *Introduction to Research Methods. A practical guide for anyone undertaking a research project*. (4<sup>th</sup> Edition). Oxford: How To Books Ltd.
- Denscombe, M. (2002). *Ground rules for good research: a 10 point guide for social researchers*: Open University Press, McGraw-Hill Education.
- Doraisamy, B., Shanmugam, A., and Raman, R. (2011). "A Study on Consumers' Preferences of Islamic banking Products and Services in Sungai Petani". *Academic Research International*, 1(3).
- Dusuki, A.W. (2008). *Islamic Finance: An Old Skeleton In A Modern Dress*. Kuala Lumpur, Malaysia: International Shari'ah Research Academy for Islamic Finance (ISRA).
- Dusuki, Asyraf Wajdi. (2005). *Corporate Social Responsibility of Islamic Banks in Malaysia: A Synthesis of Islamic and Stakeholders' Persepectives*. Unpublished Thesis (Ph.D.), Loughborough Unibersity, Loughborough.
- Dusuki, A. W. & Abdullah, N. I. (2007). "Why do Malaysian customers patronise Islamic banks?". *International Journal of Bank Marketing*, 25(3), 142-160.
- Dusuki, Asyraf Wajdi. (2007). "The ideal of Islamic Banking: A Survey of Stakeholders'perception". *Review of Islamic Economics*, 11(Special Issue), 29-52.
- Dusuki, Asyraf Wajdi. (2008). "Understanding the Objective of Islamic Banking: A Survey of Stakeholders' Perspective". *International Journal of Islamic and Middle Eastern Finance and Management*, 1 (2), 95-112.

- Ebrahim, M. S. (2008). "The Financial Crisis: Comments from Islamic Perspectives". *IJUM Journal of Economics and Management*, 16(2), 111-138.
- Ebrahim, M. S., & Joo, T. K. (2001). "Islamic Banking in Brunei Darussalam". *International Journal of Social Economics*, 23(4), 314-337.
- Edwardes, W. (2008). *Risk Management in Islamic Finance*. Paper presented at the Orientation Workshop and Research Seminar on Asset-Based and Mortgage-Based Financial Products from an Islamic Perspective, London, UK.
- Elzahi, A. E. (2005). Allocative and Technical Inefficiency in Sudanese Islamic Banks: An Empirical Investigation. In M. Iqbal & R. Wilson (Eds.), *Islamic Perspectives on Wealth Creation* (pp. 142-152): Edinburgh Univ. Press.
- Field, Andy. (2005). *Discovering Statistics Using SPSS: (And Sex, Drugs And Rock 'n' Roll)*. 2nd edition. London: SAGE.
- Fisk, R. P. & Grove, S. J. (1995). "Service Performance as Drama: Quality Implications and Measurement", in P. Kunst & J. Lemmink (eds.), *Managing Service Quality* (107-119). London: Paul Chapman Publishing Ltd.
- Flick, U. (1998). *An introduction to qualitative research*. London: Sage Publications Ltd.
- Fonseca, J. R. S. (2009). "Customer satisfaction study via a latent segment model". *Journal of Retailing and Consumer Services*, 16, 352-359.
- Gait, A., and Worthington, A. (2008). "An empirical survey of individual consumer, business firm and financial institution attitudes towards Islamic methods of finance". *International Journal of Social Economics*, 35(11), 783-808.
- Gerrard, P. and Cunningham, J. B. (1997). "Islamic Banking: A Study in Singapore". *International Journal of Bank Marketing*, 15(6), 204-216.
- Ghobadian, A., Speller, S. and Jones, M. (1994). "Service Quality Concepts and Models". *International Journal of Quality and Reliability Management*, Vol.11(9), pp.43-66.
- Grönroos, C. (1982). "An Applied Service Marketing Theory". *European Journal of Marketing*, Vol.16 (7), 30-41.
- Grönroos, C. (1984). "A service quality model and its marketing implications". *European Journal of Marketing*, Vol.18 (4), 36-44.
- Grönroos, C. (1994). "From Scientific Management to Service Management". *International Journal of Service Industry Management*, Vol.5 (1), 5-20.
- Grönroos, C., (1994). "Service Quality Model and its Marketing Implications". *European Journal of Marketing*, 18(4), 36-44.

- Halim, N. (2009, June/July 2009). Asia and the GCC Downturn. *Islamic Finance Asia*, 2, 20-21.
- Haller, S. (1995). Measuring Service Quality: The Result of Longitudinal Study in Further Education. *Managing Service Quality*. Edited by P. Kunst and J. Lemmink, Paul Chapman Publishing Ltd, London, UK, 13-27.
- Hameed, S., Wirman, A., Alrazi, B., Mohamed Nor, M. N., & Pramono, S. (2004, 19-21 April). *Alternative Disclosure & Performance Measures for Islamic Banks*. Paper presented at the 2nd Conference on Administrative Sciences, King Fahd University of Petroleum & Mineral, Dhahran, Saudi Arabia.
- Hamid, M. A., Yaakub, N. I., Mujani, W. K., Sharizam, M., and Jusoff, K. (2011). "Factors Adopting Islamic Home Financing: A Case Study Among Consumers of Islamic Banks in Malaysia". *Middle-East Journal of Scientific Research*, 7 (Special Issue of Diversity of Knowledge on Middle-East), 47-58.
- Haron, S., Ahmad, N., and Planisek, L. (1994). "Bank patronage factors of Muslim and non-Muslim customers". *International Journal of Bank Marketing*, 12 (1), 32-40.
- Haron, S., Wan Azmi, W.N. (2005, 26-29 June). *Determinant of Islamic and Conventional Deposits in the Malaysian Banking System*. Paper presented at the 12th Annual Global Finance Conference, Dublin, Ireland.
- Haron, S., and Shanmugam, B. (1997). *Islamic Banking System Concepts & Applications*. Selangor, Malaysia: Pelanduk Publications (M) Sdn Bhd.
- Hassan, M. K. (1998). "Stability of Money Demand Under Interest-Free Versus interest-Based Banking System". *Humanomics*, 14(4), 166-185.
- Hassan, M. K. (2003, 30 September-2 October 2003). *Cost, Profit and X-Efficiency of Islamic Banks in Pakistan, Iran and Sudan*. Paper presented at the International Conference on Islamic Banking: Risk Management, Regulation and Supervision, Jakarta, Indonesia.
- Hassan, M. K., & Bashir, A.-H. M. (2005). Determinants of Islamic Banking Profitability. In M. Iqbal & R. Wilson (Eds.), *Islamic Perspectives on Wealth Creation* (pp. 118-141): Edinburgh Univ. Press.
- Hassan, Z. (2007). "Fifty Years of Malaysian Economic Development: Policies and Achievements". *Review of Islamic Economics*, 11(2), 101-118.
- Heiko, H., & Cihak, M. (2008). Islamic Banking and Financial Stability [Electronic Version]. *New Horizon Islamic Banking*. Retrieved 10 October 2008 from <http://www.newhorizonislamicbanking.com/index.cfm?section=academicarticles&id=10702&action=view&return=home>.
- Hossain, M., & Leo, S. (2009). "Customer Perception on Service Quality in Retail Banking in Middle East: The Case of Qatar". *International Journal of Islamic and Middle Eastern Finance and Management*, 2(4), 338-350.

- Howcroft, B. (1993). "Staff perceptions of Service Quality in a UK Clearing Bank: Some Empirical Findings". *International Journal of Service Industry Management*. Vol. 4 (4), 5-24.
- Howcroft, B., Hamilton, R., and Hower, P. (2007). "Customer involvement and interaction in retail banking: an examination of risk and confidence in the purchase of financial products". *Journal of Services Marketing*, Vol. 21 (7), 481-491.
- Howcroft, B., Hower, P., and Hamilton, R. (2003). "consumer Decision-making Styles and the Purchase of Financial Services". *The Service Industries Journal*, Vol. 23 (3), 63-81.
- Howcroft, B. and Hill, C. (1992). "Customer Service Quality: An Empirical Study in the House Mortgage Market". *International Journal of Bank Marketing*, Vol.10 (6), 3-10.
- IFN. (2008a). Islamic Finance to the Fore [Electronic Version]. *Islamic Finance News*. Retrieved 23/10/2008.
- IFN. (2008b). Resilience and Stability are the Key [Electronic Version]. *Islamic Finance News*. Retrieved 20/11/2008.
- Ilias, S. (2009). Islamic Finance: Overview and Policy Concerns. *Congressional Research Service*, 1-7.
- Jabnoun, N., & Khalifa, A. (2005). "A customised measure of service quality in the UAE". *Managing Service Quality*, 15(4), 374-388.
- Jabnoun, N., and Al-Tamimi, H. A. H. (2003). "Measuring perceived service quality at UAE commercial banks". *International Journal of Quality & Reliability Management*, 20(4), 458-472.
- Jaffer, S. (2008). "Takaful: The Global Renaissance". *Islamic Finance Review*, 41-43.
- Johnes, J., Izzeldin, M., & Pappas, V. (2010). *Efficiency in Islamic and conventional banks: A comparison based on financial ratios and data envelopment analysis*. Paper presented at the Second workshop on Islamic Finance, Strasbourg Business School.
- Kamal, R. M. (2008). Integrating Technology into Islamic Finance. *Islamic Finance Asia*, 1, 46.
- Kamal, R. M. (2009). Resourceful Maneuvers. *Islamic Finance Asia*, 2, 14-17.
- Kang, G.-D. and James, J. (2004). "Service quality dimensions: an examination of Grönroos's service quality model". *Managing Service Quality*, Vol.14 (4), 266-277.
- Karwowski, E. (2009). *Financial Stability: The Significance and Distinctiveness of Islamic Banking in Malaysia* (Working paper): The Levy Economics Institute.

- Kassim, N. M. and Bojei, J. (2002). "Service quality: gaps in the Malaysian telemarketing industry". *Journal of Business Research*, Vol.55, 845-852.
- Key, J. P. (1997). Reliability and Validity. Retrieved 30 May 2012 from <http://www.okstate.edu/ag/agedcm4h/academic/aged5980a/5980/newpage18.htm>
- Khan, I. (2009). *The current financial crisis and the future of Islamic finance*. Paper presented at the Durham Islamic Finance Summer School 2009. School of Government and International Affairs, Durham University, UK.
- Khattak, N. A., and Rehman, K. (2010). "Customer satisfaction and awareness of Islamic banking system in Pakistan". *African Journal of Business Management*, Vol. 4(5), 662-671.
- Klein, O. (2008). Islamic Real Estate Finance: An Update. *Islamic Finance Review*, 35-36.
- Krichene, N., and Mirakhor, A. (2008). *Resilience and Stability of the Islamic Financial System - An Overview*. Paper presented at the Asset-Based and Mortgage-Based Financial Products from an Islamic Perspective, London, UK.
- Kumar, C. R. (2008). *Research Methodology* (First Edition). New Delhi: S. B. Nangia for APH Publishing Corporation.
- Kumar, M., Kee, F. T., and Charles, V. (2010). "Comparative evaluation of critical factors in delivering service quality of banks: An application of dominance analysis in modified SERVQUAL model". *International Journal of Quality and Reliability Management*, 27(3), 351-377.
- Kumar, M., Kee, F. T., & Manshor, A. T. (2009). "Determining the relative importance of critical factors in delivering service quality of banks". *Managing Service Quality*, 19(2), 211-228.
- Kumar, Ranjit. (1999). *Research Methodology: A Step-By-Step Guide for Beginner*. London SAGE.
- Lam, S.S., (1995). "Assessing the Validity of SERVQUAL: An Empirical Analysis in Hong Kong". *Asia Pacific Journal of Quality Management*. 4(4), 33-40.
- Lewis, B. R.; Orledge, J. and Mitchell, V.-W. (1994). "Service Quality: Students' Assessment of Banks and Building Societies". *International Journal of Bank Marketing*, 12(4), 3-12.
- Liljander, V. & Strandvik, T. (1995). The Relation Between Service Quality , Satisfaction and Intentions. In P. Kunst & J. Lemmink (Eds.), *Managing Service Quality* (45-63). London, UK: Paul Chapman Publishing Ltd.
- Lin, L.-Y. and Lu, C.-Y. (2010). "The influence of corporate image, relationship marketing, and trust on purchase intention: the moderating effects of word-of-mouth". *Tourism Review*, Vol.65 (3), 16-34.

- Marimuthu, M., Jing, C. W., Gie, L. P., Mun, L. P., and Ping, T. Y., (2010). "Islamic Banking: Selection Criteria and Implications". *Global Journal of Human Social Science*, Vol. 10 (4) 52-63.
- Metawa, S. A., & Almossawi, M. (1998). "Banking behavior of Islamic bank customers: perspectives and implications". *International Journal of Bank Marketing*, 16(7), 299-313.
- Mika'ilu, A.S. (1989). "On The Prohibition of Riba (Interest) And It's Implications For Optimum Economic Performance". *Hamdard Islamicus*, 12(1).313.
- Mohd-Karim, M. S. (2010). Profit-Sharing Deposit Accounts in Islamic Banking: Analysing the Perceptions and Attitudes of the Malaysian Depositors. Doctoral thesis, Durham University. Available at Durham E-Theses Online: <http://etheses.dur.ac.uk/520/>
- Mokhlis, S., (2009). "Determinants of Choice Criteria in Malaysia's Retail Banking: An Analysis of Gender-Based Choice Decisions". *European Journal of Economics, Finance and Administrative Sciences*. (16), 18-29.
- Mokhtar, H. S. A., Abdullah, N., & AlHabshi, S. M. (2007). "Technical and cost efficiency of Islamic banking in Malaysia". *Review of Islamic Economics*, 11(1), 5-40.
- Moody's, ( May 2009). *Islamic Banks- Their Strategies and Ratings*.
- Moukadam, N. (2009, 2009/2010). Post-crisis management: Technology to drive growth to the banking industry. *Islamic Finance Review*, 43-46.
- Nasser, K., Jamal, A., & Al-Khatib, K. (1999). "Islamic banking: a study of customer satisfaction and preferences in Jordan". *International Journal of Bank Marketing*, 17(3), 135-150.
- Nilsson, L., Johnson, M. D., and Gustafsson, A., (2001). "The impact of quality practices on customer satisfaction and business result: product versus service organizations". *Journal of Quality Management*, 6(1), 5-27.
- Nuradli. (2009). An exploratory study of the Islamic credit card users' satisfaction. Retrieved 27 October, 2010, from <http://nuradli.blog.friendster.com/files/an-exploratory-study-of-islamic-credit-card-holders-satisfaction1.pdf>
- Onour, I. A., & Abdalla, A. M. A. (2009). Efficiency of Islamic banks in Sudan: A non-parametric approach. Retrieved 27 October, 2010, from <http://www.arab-api.org/jodep/products/delivery/wps1012.pdf>
- Othman, A. Q., & Owen, L. (2001). "Adopting and measuring customer service quality (SQ) in Islamic banks: A case study in Kuwait Finance House". *International Journal of Islamic Financial Services*, 3(1).
- Othman, A. Q. & Owen, L. (2002). "The Multi Dimensionality of CARTER Model to Measure Customer Service Quality (SQ) in Islamic Banking Industry: A Study

- in Kuwait Finance House". *International Journal of Islamic Financial Services*, 3(4).
- Othman, A. R. M. and Owen, H. L. (2005). Managing and measuring Customer Service Quality in Islamic Banks: A Study of the Kuwait Finance House, *Islamic Perspectives on Wealth Creation*. Edited by M. Iqbal and R. Wilson, Edinburgh University Press, 69-83.
- Padhy, P. K., Swar, N. B. (2009). A study on customer satisfaction and service gaps in selected private, public and foreign banks. Proceeding of the 3<sup>rd</sup> IIMA Conference on Marketing for Emerging Economics, Organised by Indian Institute of Management, India. Retrieved on 15 December 2011 at <http://ssrn.com/abstract=1525555>.
- Pallant, J. (2007). *SPSS Survival Manual: A Step By Step to Data Analysis Using SPSS for Windows* (Third ed.). Maidenhead: Open University Press.
- Parasuraman, A., Berry, L. L., and Zeithaml, V. A. (1991). "Refinement and Reassessment of the Servqual Scale". *Journal of Retailing*, 67(4), 420-450.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). "Servqual - a Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality". *Journal of Retailing*, 64(1), 12-40.
- Parasuraman, A., Zeithaml, V. A., and Berry, L. L. (1985). "A Conceptual-Model of Service Quality and Its Implications for Future-Research". *Journal of Marketing*, 49(4), 41-50.
- Parasuraman, A., Zeithaml, V. A. and Berry, L. L. (1994). "Alternative Scales for Measuring Service Quality - a Comparative-Assessment Based on Psychometric and Diagnostic-Criteria". *Journal of Retailing*, Vol.70 (3), 201-230.
- Paswan, A. K., Spears, N., Hasty, R. and Ganesh, G. (2004). "Search quality in the financial services industry: a contingency perspective". *Journal of Service Marketing*, Vol.18 (5), 324-338.
- Pfeifer, T. (2002). *Quality Management*, Hanser Gardner Publication Inc., Munchen, Germany.
- Proctor, Tony. (2005). *Essentials of Marketing Research* (Fourth edition). Harlow: Pearson Education Limited.
- Rafiq, M., and Ahmed, P. K. (1995). The Limits of Internal Marketing. In P. Kunst & J. Lemmink (Eds.), *Managing Service Quality* (121-132). London, UK: Paul Chapman Publishing Ltd.
- Rashid, M., Hassan, M.K., and Ahmad, A. U. F. (2008). "Quality Perception of the Customers towards Domestic Islamic Banks in Bangladesh". *Journal of Islamic Economics, Banking and Finance*, 5(1), 109-131.



- Ree, H. J. V. (2009). Service quality indicators for business support service. Unpublished master thesis (London: University College London) 226.
- Reeves, C. A. and Bednar, D. A. (1994). "Defining Quality: Alternatives and Implications". *Academy of Management Review*, 19(3), 419-445.
- Richey, R. C., and Klein, J. D. (2007). *Design and development research*. New Jersey: Lawrence Erlbaum Associate, Inc.
- Rosly, S. A. and Bakar, M. A. A. (2003). "Performance of Islamic and Mainstream Banks in Malaysia". *International Journal of Social Economics*.30(12):1249-1265.
- Ryan, B., Scapens, R. W., and Theobald, M. (2002). *Research Method and Methodology in Finance and Accounting* (Second Edition). London,Thomson.
- Sairally, S. (2007). "Community Development Financial Institutions: Lessons in Social Banking for the Islamic Financial Industry". *Kyoto Bulletin of Islamic Area Studies*, 1(2), 19-37.
- Saleem, M. (2005). *Islamic Banking: a \$300 billion deception*. United States: Xlibris.
- Samad, A., and Hassan, M. K. (1999). "The Performance of Malaysian Islamic Bank During 1984-1997: An Exploratory Study". *International Journal of Islamic Financial Services*, 1(3).
- Sangeetha, J. (2011). "Service quality models in banking: a review". *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 4 (1), 83-103.
- Sapsford, R., and Jupp, V. (Eds.). (2006). *Data Collection and Analysis* (Second Edition). London: SAGE Publications Ltd.
- Sarker, M. A. (1999). "Islamic Banking in Bangladesh: Performance, Problem & Prospects". *International Journal of Islamic Financial Services*, 1(3).
- Satkunasingam, E. & Shanmugam, B. (2004). "Disclosure and Governance of Islamic Banks: A Case Study of Malaysia". *Journal of International Banking Regulation*, 6(1).
- Saunders, M., Lewis, P., and Thornhill, A. (2009). *Research methods for business students* (Fifth Edition.). Essex: Pearson Education Limited.
- Sekaran, U. (2000). *Research Methods for Business*. New York, John Wiley & Sons.
- Shafie, S., Azmi, W. N. W., & Haron, S. (2004). "Adopting and measuring customer service quality in Islamic banks: A case study of Bank Islam Malaysia Berhad". *Journal of Muamalat and Islamic Finance Research*, 1(1).
- Sharif, S. P., & Mirzaee, S. (2010). Comparison between Muslims' and non-Muslims' satisfaction towards Islamic banks in Malaysia by using SERVQUAL and

CARTER models. Retrieved on 5 April 2012 from <http://ssrn.com/abstract=1898708>.

Shariff, R. A. M. (2010). *Towards a sustainable socio-economic development: Is there a need for a socially inclusive financial system?* Paper presented at CBA 4<sup>th</sup> International Conference "Global Economic Crisis from Islamic Economic Perspectives" on 15-16 December 2010, Kuwait University, Kuwait.

Shariff, R. A. M. (2012). *Service Quality and Customers Satisfaction: An Exploratory Study*. Paper presented at 2<sup>nd</sup> Global Islamic Marketing Conference on 17-18 January 2012, UAE University, Abu Dhabi, United Arab Emirates.

Shariff, R. A. M. and Al-Adwani, T. (2012). *An Empirical Study of Perceived Service Quality of Islamic Banks: A Comparison between Malaysia and Kuwait*. Paper presented at Gulf Research Meeting 2012 "Islamic Banking in the GCC" on 11-14 July 2012, Cambridge University, Cambridge, United Kingdom.

Smith, M. (2007). *Research Methods in Accounting*. London, SAGE Publications Ltd.

Srairi, S. A. (2009). "Factors Influencing the Profitability of Conventional and Islamic Commercial Banks in GCC Countries". *Review of Islamic Economics*, 13(1), 5-30.

Storbacka, K., Strandvik, T. and Grönroos, C. (1994), "Managing customer relationships for profit: The dynamics of relationship quality". *International Journal of Service Industry Management*, Vol.5(5), pp.21-38.

Sufian, F. (2006). "The efficiency of the Islamic banking industry in Malaysia: Foreign vs. Domestic banks". *Review of Islamic Economics*, 10(2), 27-53.

Sufian, F. (2007). "The efficiency of Islamic banking industry in Malaysia: Foreign vs domestic banks". *Humanomics*, 23(3), 174-192.

Sureshchandar, G. S., Rajendran, C., and Kamalanabhan, T. J. (2001). "Customer perceptions of service quality: A critique". *Total Quality Management*, 12(1), 111-124.

Tahir, I. M., and Bakar, N. M. A. (2007). "Service quality gap and customers' satisfactions of commercial banks in Malaysia". *International Review of Business Research Papers*, 3(4), 327-336.

Taufiq, H., Shamser, M., and Bader, M. k. I. (2009). "Efficiency of Conventional versus Islamic banks: evidence from the Middle East". *International Journal of Islamic and Middle Eastern Finance and Management*, 2(1), 46-65.

Taylor, B., Sinha, G., and Ghoshal, T. (2006). *Research Methodology: A guide for researchers in management and social sciences*. New Delhi: Prentice-Hall.

Thomas, A. (2009). Is it really so bad? *Islamic Finance Asia*, 2, 10.

- Trietsch, D. (1999). *Statistical quality control: A loss minimization approach*. World Scientific.
- Usmani, J. M. M. T. (2010). *Post-Crisis Reforms: Some Points to Ponder*. Paper presented at the Islamic Banking and Finance-World Economic Forum 2010.
- Usmani, M. I. A. (2009). Examining the prudence of Islamic banks: A risk management perspective. *Islamic Finance Review*, 5-8.
- Vanderstoep, S. W., and Johnston, D. D. (2009). *Research methods for everyday life : blending qualitative and quantitative approaches*. San Francisco, United States of America: Jossey-Bass.
- Vaus, D.D. (2002). *Surveys in Social Research* (Fifth edition). London: Routledge.
- Wilson, M., and Sapsford, R. (2006). Asking Questions. In R. Sapsford & V. Jupp (Eds.), *Data collection and analysis* (Second edition ed., pp. 93-123). London: SAGE Publications Ltd.
- Wuhrer, G. A. (1995). Quality Positioning in the Austrian Banking Industry: A Benchmark Case Study. *Managing Service Quality*. Edited by P. Kunst and J. Lemmink, Paul Chapman Publishing Ltd, London, UK, 1-12.
- Yudistira, D. (2003, 30 September-2 October 2003). *Efficiency in Islamic Banking: An Empirical Analysis of 18 Banks*. Paper presented at the International Conference on Islamic Banking: Risk Management, Regulation and Supervision, Jakarta, Indonesia.
- Zaman, N., & Asutay, M. (2009). Divergence between aspirations and realities of Islamic economics: A political economy approach to bridging the divide. *IIUM Journal of Economics and Management*, 17(1), 73-96.
- Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1990). *Delivering Quality Service. Balancing Customer Perceptions and Expectation*. New York: The Free Press.
- Zeithaml, V. A., Parasuraman, A. and Berry, L. L. (1990). *Delivering Quality Service. Balancing Customer Perceptions and Expectation*, The Free Press, New York.

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# A Survey of Customers' Expectation and Perception on SERVICE QUALITY OF ISLAMIC BANKS

This research survey is to measure the customers' understanding and opinion on the issue of service quality of Islamic banks. Therefore, being a customer of Islamic banks, we would like to seek your kind cooperation to give your valuable opinion which is contributing towards the success of this research.

Most of the questions merely require you to tick the appropriate box. All the information given will be treated in the strictest confidentiality.  
Your participation in this research is greatly appreciated.

## General Instructions and Information

1. All individual responses to this questionnaire will be kept **STRICTLY CONFIDENTIAL** and for academic research purpose only.
2. Please do not worry about questions that seemingly look alike. If you do not have the exact answer to a question, please provide your best judgement by ticking the appropriate boxes in the questions. **Your answers are very important to the accuracy of the study.**
3. If you wish to make any comment, please feel free to use the space at the end of the questionnaire.

Please return the completed questionnaire in the enclosed self-address, stamped envelope before \_\_\_\_\_.

### For Office Use Only:

Date of Interview/Questionnaire Returned: \_\_\_\_/\_\_\_\_/\_\_\_\_

Bank's Branch Code:

Time of Interview: \_\_\_\_\_ A.M. /P.M.

Respondent Number:

## SECTION 1: Knowledge and Awareness about Islamic Banking

### 1. Are you familiar with the following concepts of Islamic bank?

(Please tick (✓) in an appropriate box)

	Yes	No		Yes	No
Bai' Al-Dayn	<input type="checkbox"/>	<input type="checkbox"/>	Hiwalah	<input type="checkbox"/>	<input type="checkbox"/>
Bai' Al-Inah	<input type="checkbox"/>	<input type="checkbox"/>	Ijarah	<input type="checkbox"/>	<input type="checkbox"/>
Bai' Bithaman Ajil	<input type="checkbox"/>	<input type="checkbox"/>	Ijarah Thumma Al-Bai'	<input type="checkbox"/>	<input type="checkbox"/>
Bai' Al-Salam	<input type="checkbox"/>	<input type="checkbox"/>	Kafalah	<input type="checkbox"/>	<input type="checkbox"/>
Tawarruq	<input type="checkbox"/>	<input type="checkbox"/>	Qard	<input type="checkbox"/>	<input type="checkbox"/>
Istisna'	<input type="checkbox"/>	<input type="checkbox"/>	Murabahah	<input type="checkbox"/>	<input type="checkbox"/>
Musyarakah	<input type="checkbox"/>	<input type="checkbox"/>	Mudharabah	<input type="checkbox"/>	<input type="checkbox"/>
Wadiah	<input type="checkbox"/>	<input type="checkbox"/>	Ujr	<input type="checkbox"/>	<input type="checkbox"/>
Rahnu	<input type="checkbox"/>	<input type="checkbox"/>	Wakalah	<input type="checkbox"/>	<input type="checkbox"/>
Sarf	<input type="checkbox"/>	<input type="checkbox"/>	Sukuk	<input type="checkbox"/>	<input type="checkbox"/>

### 2. How important are the following factors influencing your judgement when opening an account with Islamic bank? (Please tick (✓) one from each statement)

	Not Important At All	Not Important	Neutral	Important	Very Important
• Religious obligation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Islamic branding and image	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Price of the financial products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Competitive rate of return	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Number of branches available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Customer service quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Courteous and competent personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Convenience (e.g. comfort interior design)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Location being near work or home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Encouragement from friends and family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Internet banking facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Others- (please specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## SECTION 2 : Service Quality of Islamic Bank

(Please tick (✓) in an appropriate box)

**3. Have you ever experienced service problem with your current Islamic bank?**

☐

Yes

☐

No

(Please proceed to question 6)

**4. If your answer is 'Yes' in question 3, is your problem satisfactorily solved?**

☐

Yes

☐

No

**5. In your opinion, what was the cause of the service quality problem in Islamic bank?**

(You may tick (✓) more than one)

☐

Lack of values and inspiration

☐

Lack of personal skills

☐

Lack of adequate number of staff

☐

Cultural barriers

☐

Habit developed over time

☐

Policies and procedures

☐

Equipment failure

☐

Communication breakdown

**6. The following statements are related to your EXPECTATION of Service Quality of an EXCELLENT Islamic Bank. Please show the extent to which you think such an excellent Islamic bank should possess the feature described by each statement.**

	Excellent Islamic banks should have:	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1)	Modern-looking equipment. (such as internet banking terminal, cash/cheque deposit machines )					
2)	Visually appealing interior design and facilities.					
3)	Applications are processed on time.					
4)	Brochures and forms are clear and easy to understand.					
5)	Advertised promises are consistent with its performance.					
6)	Business transactions are accurate.					
7)	Customers' problems are promptly and sincerely solved.					
8)	Employees are neat-appearing.					
9)	Employees insist on error-free records.					
10)	Employees give customers prompt service.					
11)	Customers are told when services will be performed.					
12)	Employees are willing to help their customers.					
13)	Employees are never too busy to respond to customers requests.					

14)	Employees give customers personal attention.					
15)	Employees understand the specific needs of their customers.					
16)	Employees are courteous with customers.					
17)	Employees have the knowledge to answer customers' questions.					
18)	Employees' behavior instills confidence in customers.					
19)	Customers feel safe in their transaction.					
20)	Give their customers individual attention.					
21)	Have their customer's best interest at heart.					
22)	Have operating hours convenient to all its customers.					
23)	Provide banking services according to Islamic <i>Shari'ah</i> .					
24)	Have well known and trustworthy <i>Shari'ah</i> Advisory Board.					
25)	Neither pays nor takes interest on savings and loan accounts.					
26)	Provide profit-sharing investment account.					
27)	Socially responsible.					
28)	Products and services prices are competitive.					
29)	Employees have knowledge on Islamic banking products and services.					

**7. The following set of statements relate to your feelings about YOUR Islamic bank. For each statement, please show the extent to which you believe your Islamic bank has the feature described by the statement.**

	<b>Your Islamic banks have:</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1)	Modern-looking equipment. (such as internet banking terminal, cash/cheque deposit machines )					
2)	Visually appealing interior design and facilities.					
3)	Applications are processed on time.					
4)	Brochures and forms are clear and easy to understand.					
5)	Advertised promises are consistent with its performance.					
6)	Business transactions are accurate.					

7)	Customers' problems are promptly and sincerely solved.					
8)	Employees are neat-appearing.					
9)	Employees insist on error-free records.					
10)	Employees give customers prompt service.					
11)	Customers are told when services will be performed.					
12)	Employees are willing to help their customers.					
13)	Employees are never too busy to respond to customers requests.					
14)	Employees give customers personal attention.					
15)	Employees understand the specific needs of their customers.					
16)	Employees are courteous with customers.					
17)	Employees have the knowledge to answer customers' questions.					
18)	Employees' behavior instills confidence in customers.					
19)	Customers feel safe in their transaction.					
20)	Give their customers individual attention.					
21)	Have their customer's best interest at heart.					
22)	Have operating hours convenient to all its customers.					
23)	Provide banking services according to Islamic <i>Shari'ah</i> .					
24)	Have well known and trustworthy <i>Shari'ah</i> Advisory Board.					
25)	Neither pays nor takes interest on savings and loan accounts.					
26)	Provide profit-sharing investment account.					
27)	Socially responsible.					
28)	Products and services prices are competitive.					
29)	Employees have knowledge on Islamic banking products and services.					



**8. How much do you agree with the following statements related to Service Quality of Islamic bank?**

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Islamic banks must provide excellent service to fulfill the religious obligation in addition to satisfy their customers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service quality increases efficiency and productivity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service quality will earn customer loyalty.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service quality fan positive word-of-mouth advertising.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service quality will shelter Islamic bank from price competition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service quality will enhance image and values of Islamic bank.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Customer is willing to pay more for a better service quality.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Customer is willing to pay more for Shari'ah compliant products.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would recommend my Islamic bank to my friends and family members.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**9. Are you satisfied with the service quality of your Islamic bank?**

- ☐ Very satisfied
- ☐ Satisfied
- ☐ I do not care / I do not bother
- ☐ Not satisfied
- ☐ Not satisfied at all

**10. What is your general comment / suggestion for the Islamic bank to improve on its service quality?**

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### SECTION 3: Personal Information

(Please tick (√) in an appropriate box)

**11. Gender:**

☐ Male

☐ Female

**12. Age:**

☐ Below 20

☐ 21– 30

☐ 31– 40

☐ 41– 50

☐ Above 50

**13. Marital Status:**

☐ Single

☐ Widow

☐ Married

**14. Ethnicity:**

☐ Malay

☐ Chinese

☐ Indian

☐ Others – (Please specify)

**15. Religion:**

☐ Muslim

☐ Buddhist

☐ Hindu

☐ Christian

☐ Others– (Please specify)

**16. Highest Education Level:**

☐ Primary/Secondary School

☐ College Diploma/Matriculation/A-Level

☐ Bachelor (First Degree)

☐ Professional Qualification

☐ Postgraduate (Master or PhD)

☐ Others (Please Specify): \_\_\_\_\_

**17. Monthly Income:**

☐ RM 1,000 and below

☐ RM 1,001- RM 3,000

☐ RM 3,001- RM 5,000

☐ RM 5,001- RM 10,000

☐ RM 10,001– RM 20,000

☐ More than RM 20,000

**18. Occupation:**

☐ Manager/Executive

☐ Professional (lawyer, engineer, accountant, doctor etc.)

☐ Academician /Education

☐ Housewife

☐ Student

☐ Merchants/Businessman

☐ Farmer

☐ Unemployed

☐ Retired

☐ Others– (Please specify)

**19. Which of the following Islamic banks do you deal with?**

(Please tick (√) only one which represents the most active account)

Affin Islamic Bank Berhad		Hong Leong Islamic Bank Berhad	
Al-Rajhi Banking & Investment Corp. (M'sia)		HSBC Amanah Malaysia Berhad	
Alliance Islamic Bank Berhad		Kuwait Finance House (M'sia) Berhad	
AmIslamic Bank Berhad		Maybank Islamic Berhad	
Asian Finance Bank Berhad		OCBC Al-Amin Bank Berhad	
Bank Islam Malaysia Berhad		Public Islamic Bank Berhad	
Bank Muamalat Malaysia Berhad		RHB Islamic Bank Berhad	
CIMB Islamic Bank Berhad		Standard Chartered Saadiq Berhad	
EONCAP Islamic Bank Berhad			

**20. How long have you been a customer of this Islamic bank?**

- |   |  |
|---|--|
| <input type="checkbox"/> Less than 1 year | <input type="checkbox"/> 3- 5 years        |
| <input type="checkbox"/> 1- 3 years       | <input type="checkbox"/> More than 5 years |

**21. Do you have any account with other banks?**

- |   |   |
|---|---|
| <input type="checkbox"/> Yes, with conventional bank  | <input type="checkbox"/> Yes, with conventional bank and other Islamic bank |
| <input type="checkbox"/> Yes, with other Islamic bank | <input type="checkbox"/> No. Only with this Islamic bank                    |

**22. What kind of banking facilities have you used with your Islamic bank?**

*(You may select more than one)*

- |  |  |
|--|--|
| <input type="checkbox"/> Current account             | <input type="checkbox"/> Education financing           |
| <input type="checkbox"/> Saving account              | <input type="checkbox"/> Personal financing            |
| <input type="checkbox"/> General investment account  | <input type="checkbox"/> Credit card/charge card       |
| <input type="checkbox"/> Specific investment account | <input type="checkbox"/> Vehicle financing             |
| <input type="checkbox"/> Home financing              | <input type="checkbox"/> Others (Please specify) _____ |

**Thank you for taking the time to complete this questionnaire. Your assistance in providing this information is very much appreciated. If there is anything else you would like to tell us about this survey or other comments you wish to make that you think may help us to understand the Service Quality of Islamic Banks and issues arising thereof, please do so in the space (box) provided below.**

School of Government and International Affairs  
Durham University, United Kingdom.  
E-mail: [r.a.mohd-shariff-tawil@durham.ac.uk](mailto:r.a.mohd-shariff-tawil@durham.ac.uk)

# A Survey of Customers' Expectation and Perception on SERVICE QUALITY OF BANKS

This research survey is to measure the understanding and opinion of customers' on the issue of service quality of banks. Therefore, being a customer of a bank, we would like to seek your cooperation to give your valuable opinion which is contributing towards the success of this research.

Most of the questions merely require you to tick the appropriate box. All the information given will be treated in the strictest confidence.  
Your participation in this research is greatly appreciated.

## General Instructions and Information

**1. All individual responses to this questionnaire will be kept STRICTLY CONFIDENTIAL and for academic research purpose only.**

**2. Please do not worry about questions that seemingly look alike. If you do not have the exact answer to a question, please provide your best judgement by ticking the appropriate boxes in the questions. Your answers are very important to the accuracy of the study.**

**3. If you wish to make any comment, please feel free to use the space at the end of the questionnaire.**

Please return the completed questionnaire in the enclosed self-address, stamped envelope before \_\_\_\_\_.

### For Office Use Only:

Date of Interview/Questionnaire Returned: \_\_\_\_/\_\_\_\_/\_\_\_\_

Bank's Branch Code:

Time of Interview: \_\_\_\_\_ A.M. /P.M.

Respondent Number:

## SECTION 1: Knowledge and Awareness about Banking

### 1. Are you familiar with the following products and services of Malaysian bank?

(Please tick (✓) in an appropriate box)

	Yes	No		Yes	No
Saving Account	<input type="checkbox"/>	<input type="checkbox"/>	Trustee Service	<input type="checkbox"/>	<input type="checkbox"/>
Current Account	<input type="checkbox"/>	<input type="checkbox"/>	Leasing	<input type="checkbox"/>	<input type="checkbox"/>
Fixed Deposit	<input type="checkbox"/>	<input type="checkbox"/>	Hire-Purchase	<input type="checkbox"/>	<input type="checkbox"/>
Credit Card	<input type="checkbox"/>	<input type="checkbox"/>	Personal Loan	<input type="checkbox"/>	<input type="checkbox"/>
Home Loan	<input type="checkbox"/>	<input type="checkbox"/>	Wealth Management	<input type="checkbox"/>	<input type="checkbox"/>
Unit Trust	<input type="checkbox"/>	<input type="checkbox"/>	Receivable Finance	<input type="checkbox"/>	<input type="checkbox"/>
Interest Rate	<input type="checkbox"/>	<input type="checkbox"/>	Financing	<input type="checkbox"/>	<input type="checkbox"/>
Insurance	<input type="checkbox"/>	<input type="checkbox"/>	Export and Import Services	<input type="checkbox"/>	<input type="checkbox"/>
Internet Banking	<input type="checkbox"/>	<input type="checkbox"/>	Telephone Banking	<input type="checkbox"/>	<input type="checkbox"/>
Foreign Exchange	<input type="checkbox"/>	<input type="checkbox"/>	Bond	<input type="checkbox"/>	<input type="checkbox"/>
Vehicle Financing	<input type="checkbox"/>	<input type="checkbox"/>	Education Financing	<input type="checkbox"/>	<input type="checkbox"/>

### 2. How important are the following factors influencing your judgement when opening an account with a bank?

(Please tick (✓) one from each statement)

	Not Important At All	Not Important	Neutral	Important	Very Important
• Brand name and image	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Price of the financial products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Competitive rate of return	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Number of branches available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Customer service quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Courteous and competent personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Convenience (e.g. comfort interior design)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Location being near work or home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Encouragement from friends and family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Internet banking facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Others- (please specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## SECTION 2:Service Quality of Bank

(Please tick (✓) in an appropriate box)

**3. Have you ever had experienced service problem with your current bank?**

- ☐ Yes  
☐ No (Please proceed to question 6)

**4. If your answer is 'Yes' in question 3, is your problem satisfactorily solved?**

- ☐ Yes  
☐ No

**5. In your opinion, what was the cause of the service quality problem in a bank?**

(You may tick (✓) more than one)

- |   |  |
|---|--|
| <input type="checkbox"/> Lack of values and inspiration   | <input type="checkbox"/> Lack of personal skills |
| <input type="checkbox"/> Lack of adequate number of staff | <input type="checkbox"/> Culture                 |
| <input type="checkbox"/> Habit developed over time        | <input type="checkbox"/> Policies and procedures |
| <input type="checkbox"/> Equipment failure                | <input type="checkbox"/> Communication breakdown |

**6. The following statements are related to your EXPECTATION of Service Quality of an EXCELLENT Bank. Please show the extent to which you think such an excellent bank should possess the feature described by each statement.**

	Excellent banks should have:	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1)	Modern-looking equipment. (such as internet banking terminal, cash/cheque deposit machines )					
2)	Visually appealing interior design and facilities.					
3)	Applications are processed on time.					
4)	Brochures and forms are clear and easy to understand.					
5)	Advertised promises are consistent with its performance.					
6)	Business transactions are accurate.					
7)	Customers' problems are promptly and sincerely solved.					
8)	Employees are neat-appearing.					
9)	Employees insist on error-free records.					
10)	Employees give customers prompt service.					
11)	Customers are told when services will be performed.					
12)	Employees are willing to help their customers.					
13)	Employees are never too busy to respond to customers requests.					
14)	Employees give customers personal attention.					
15)	Employees understand the specific needs of their customers.					

16)	Employees are courteous with customers.					
17)	Employees have the knowledge to answer customers' questions.					
18)	Employees' behavior instills confidence in customers.					
19)	Customer feel safe in their transaction.					
20)	Give their customers individual attention.					
21)	Have their customer's best interest at heart.					
22)	Have operating hours convenient to all its customers.					
23)	Socially responsible.					

**7. The following set of statements relate to your feelings about YOUR current bank. For each statement, please show the extent to which you believe your bank has the feature described by the statement.**

	<b>Your banks have:</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1)	Modern-looking equipment. (such as internet banking terminal, cash/cheque deposit machines )					
2)	Visually appealing interior design and facilities.					
3)	Applications are processed on time.					
4)	Brochures and forms are clear and easy to understand.					
5)	Advertised promises are consistent with its performance.					
6)	Business transactions are accurate.					
7)	Customers' problems are promptly and sincerely solved.					
8)	Employees are neat-appearing.					
9)	Employees insist on error-free records.					
10)	Employees give customers prompt service.					
11)	Customers are told when services will be performed.					
12)	Employees are willing to help their customers.					
13)	Employees are never too busy to respond to customers requests.					
14)	Employees give customers personal attention.					
15)	Employees understand the specific needs of their customers.					
16)	Employees are courteous with customers.					
17)	Employees have the knowledge to answer customers' questions.					

18)	Employees' behavior instills confidence in customers.					
19)	Customer feel safe in their transaction.					
20)	Give their customers individual attention.					
21)	Have their customer's best interest at heart.					
22)	Have operating hours convenient to all its customers.					
23)	Socially responsible.					

**8. How much do you agree with the following statements related to Service Quality of a bank?**

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
Service quality increases efficiency and productivity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service quality will earn customer loyalty.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service quality fan positive word-of-mouth advertising.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service quality will shelter bank from price competition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service quality will enhance image and values of a bank.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Customer is willing to pay more for a better service quality.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would recommend my bank to my friends and family members.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**9. Are you satisfied with the service quality of your current bank?**

- ☐ Very satisfied  
☐ Satisfied  
☐ I do not care / I do not bother  
☐ Not satisfied  
☐ Not satisfied at all

**10. What is your general comment / suggestion for the bank to improve on its service quality?**

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### SECTION 3: Personal Information

(Please tick (✓) in an appropriate box)

#### 11. Gender:

☐ Male

☐ Female

#### 12. Age:

☐ Below 20

☐ 41 – 50

☐ 21– 30

☐ Above 50

☐ 31– 40

#### 13. Marital Status:

☐ Single

☐ Married

☐ Widow

#### 14. Ethnicity:

☐ Malay

☐ Others – (Please specify)

☐ Chinese

☐ Indian

#### 15. Religion:

☐ Muslim

☐ Christian

☐ Buddhist

☐ Others– (Please specify)

☐ Hindu

#### 16. Highest Education Level:

☐ Primary/Secondary School

☐ Professional Qualification

☐ CollegeDiploma/Matriculation/A-Level

☐ Postgraduate (Master or PhD)

☐ Bachelor (First Degree)

☐ Others (Please Specify): \_\_\_\_\_

#### 17. Monthly Income:

☐ RM 1,000 and below

☐ RM 5,001 - RM 10,000

☐ RM 1,001 - RM 3,000

☐ RM 10,001– RM 20,000

☐ RM 3,001 - RM 5,000

☐ More than RM 20,000

**18. Occupation:**

- |   |   |
|---|---|
| <input type="checkbox"/> Manager/Executive  | <input type="checkbox"/> Merchants/Businessman          |
| <input type="checkbox"/> Professional (lawyer, engineer, accountant, doctor etc.) | <input type="checkbox"/> Farmer                         |
| <input type="checkbox"/> Academician/ Education                                   | <input type="checkbox"/> Unemployed                     |
| <input type="checkbox"/> Housewife  | <input type="checkbox"/> Retired                        |
| <input type="checkbox"/> Student  | <input type="checkbox"/> Others– (Please specify) _____ |

**19. Which of the following banks do you deal with?***(Please tick (√) only one which represents the most active account)*

Affin Bank Berhad		Hong Leong Bank Berhad	
AmBank Berhad		HSBC Malaysia Berhad	
Alliance Bank Berhad		Citibank Berhad	
Bangkok Bank Berhad		Malayan Banking Berhad	
Bank of America Malaysia		OCBC Bank Berhad	
Bank of China (Malaysia) Berhad		Public Bank Berhad	
Bank of Tokyo-Mitsubishi UFJ Malaysia Berhad		United Overseas Bank (Malaysia) Berhad	
CIMB Bank Berhad		Standard Chartered Berhad	
EON Bank Berhad		Deutsche Bank (Malasia) Berhad	
J.P. Morgan Chase Bank Berhad		The Bank of Nova Scotia Berhad	
The Royal Bank of Scotland Berhad		RHB Bank Berhad	

**20. How long have you been a customer of this bank?**

- |   |  |
|---|--|
| <input type="checkbox"/> Less than 1 year | <input type="checkbox"/> 3- 5 years        |
| <input type="checkbox"/> 1- 3 years       | <input type="checkbox"/> More than 5 years |

**21. Do you have any account with other banks?**

- |  |   |
|--|---|
| <input type="checkbox"/> Yes, with other conventional bank | <input type="checkbox"/> Yes, with other conventional bank and Islamic bank |
| <input type="checkbox"/> Yes, with Islamic bank            | <input type="checkbox"/> No. Only with this bank                            |

**22. What kind of banking facilities have you used with the bank?***(You may select more than one)*

- |  |  |
|--|--|
| <input type="checkbox"/> Current account             | <input type="checkbox"/> Education financing           |
| <input type="checkbox"/> Saving account              | <input type="checkbox"/> Personal financing            |
| <input type="checkbox"/> General investment account  | <input type="checkbox"/> Credit card/charge card       |
| <input type="checkbox"/> Specific investment account | <input type="checkbox"/> Vehicle financing             |
| <input type="checkbox"/> Home financing              | <input type="checkbox"/> Others (Please specify) _____ |

**Thank you for taking the time to complete this questionnaire. Your assistance in providing this information is very much appreciated. If there is anything else you would like to tell us about this survey or other comments you wish to make that you think may help us to understand the Service Quality of Banks and issues arising thereof, please do so in the space (box) provided below.**

## APPENDIX 3

### 1. Gap Analysis for Service Quality Dimensions (Wilcoxon Signed Ranks Test)

#### 1.1 Tangible

Wilcoxon Signed Ranks Tests				
		N	Mean Rank	Sum of Ranks
Perception Tangible - Expectation Tangible	Negative Ranks	509 <sup>a</sup>	384.00	195457.00
	Positive Ranks	178 <sup>b</sup>	229.61	40871.00
	Ties	254 <sup>c</sup>		
	Total	941		
a. Perception Tangible < Expectation Tangible				
b. Perception Tangible > Expectation Tangible				
c. Perception Tangible = Expectation Tangible				
Test Statistics <sup>b</sup>				
	Perception Tangible - Expectation Tangible			
Z	-14.957 <sup>a</sup>			
Asymp. Sig. (2-tailed)	.000			
a. Based on positive ranks.				
b. Wilcoxon Signed Ranks Test				

#### 1.2 Reliability

Wilcoxon Signed Ranks Tests				
		N	Mean Rank	Sum of Ranks
Perception Reliability - Expectation Reliability	Negative Ranks	573 <sup>a</sup>	382.04	218911.50
	Positive Ranks	120 <sup>b</sup>	179.66	21559.50
	Ties	248 <sup>c</sup>		
	Total	941		
a. Perception Reliability < Expectation Reliability				
b. Perception Reliability > Expectation Reliability				
c. Perception Reliability = Expectation Reliability				
Test Statistics <sup>b</sup>				
	Perception Reliability - Expectation Reliability			
Z	-18.750 <sup>a</sup>			
Asymp. Sig. (2-tailed)	.000			
a. Based on positive ranks.				
b. Wilcoxon Signed Ranks Test				

#### 1.3 Responsiveness

Wilcoxon Signed Ranks Tests				
		N	Mean Rank	Sum of Ranks
Perception Responsiveness - Expectation Responsiveness	Negative Ranks	565 <sup>a</sup>	354.01	200017.00
	Positive Ranks	87 <sup>b</sup>	147.83	12861.00
	Ties	289 <sup>c</sup>		
	Total	941		
a. Perception Responsiveness < Expectation Responsiveness				
b. Perception Responsiveness > Expectation Responsiveness				
c. Perception Responsiveness = Expectation Responsiveness				

Test Statistics <sup>b</sup>	
	Perception Responsiveness - Expectation Responsiveness
<b>Z</b>	-19.494 <sup>a</sup>
<b>Asymp. Sig. (2-tailed)</b>	.000
<b>a. Based on positive ranks.</b>	
<b>b. Wilcoxon Signed Ranks Test</b>	

#### 1.4 Assurance

Wilcoxon Signed Ranks Tests				
		N	Mean Rank	Sum of Ranks
Perception Assurance - Expectation Assurance	Negative Ranks	521 <sup>a</sup>	357.08	186041.00
	Positive Ranks	118 <sup>b</sup>	156.26	18439.00
	Ties	302 <sup>c</sup>		
	Total	941		
<b>a. Perception Assurance &lt; Expectation Assurance</b>				
<b>b. Perception Assurance &gt; Expectation Assurance</b>				
<b>c. Perception Assurance = Expectation Assurance</b>				
Test Statistics <sup>b</sup>				
	Perception Assurance - Expectation Assurance			
<b>Z</b>	-18.007 <sup>a</sup>			
<b>Asymp. Sig. (2-tailed)</b>	.000			
<b>a. Based on positive ranks.</b>				
<b>b. Wilcoxon Signed Ranks Test</b>				

#### 1.5 Empathy

Wilcoxon Signed Ranks Tests				
		N	Mean Rank	Sum of Ranks
Perception Empathy - Expectation Empathy	Negative Ranks	545 <sup>a</sup>	417.40	227485.50
	Positive Ranks	177 <sup>b</sup>	189.36	33517.50
	Ties	219 <sup>c</sup>		
	Total	941		
<b>a. Perception Empathy &lt; Expectation Empathy</b>				
<b>b. Perception Empathy &gt; Expectation Empathy</b>				
<b>c. Perception Empathy = Expectation Empathy</b>				
Test Statistics <sup>b</sup>				
	Perception Empathy - Expectation Empathy			
<b>Z</b>	-17.341 <sup>a</sup>			
<b>Asymp. Sig. (2-tailed)</b>	.000			
<b>a. Based on positive ranks.</b>				

#### 1.6 Social Responsibility

Wilcoxon Signed Ranks Tests				
		N	Mean Rank	Sum of Ranks
Perception Social - Expectation Social	Negative Ranks	392 <sup>a</sup>	244.88	95991.50
	Positive Ranks	78 <sup>b</sup>	188.38	14693.50
	Ties	471 <sup>c</sup>		
	Total	941		

<b>a. Perception Social &lt; Expectation Social</b>	
<b>b. Perception Social &gt; Expectation Social</b>	
<b>c. Perception Social = Expectation Social</b>	
<b>Test Statistics<sup>b</sup></b>	
	Perception Social - Expectation Social
<b>Z</b>	-14.372 <sup>a</sup>
<b>Asymp. Sig. (2-tailed)</b>	.000
<b>a. Based on positive ranks.</b>	
<b>b. Wilcoxon Signed Ranks Test</b>	

## 1.7 Islamic Values

<b>Wilcoxon Signed Ranks Tests</b>				
		N	Mean Rank	Sum of Ranks
<b>Perception Islamic - Expectation Islamic</b>	Negative Ranks	301 <sup>a</sup>	193.56	58261.50
	Positive Ranks	54 <sup>b</sup>	91.27	4928.50
	Ties	132 <sup>c</sup>		
	Total	487		
<b>a. Perception Islamic &lt; Expectation Islamic</b>				
<b>b. Perception Islamic &gt; Expectation Islamic</b>				
<b>c. Perception Islamic = Expectation Islamic</b>				

<b>Test Statistics<sup>b</sup></b>	
	Perception Islamic - Expectation Islamic
<b>Z</b>	-13.800 <sup>a</sup>
<b>Asymp. Sig. (2-tailed)</b>	.000
<b>a. Based on positive ranks.</b>	
<b>b. Wilcoxon Signed Ranks Test</b>	

## 2. Factor Analysis for the Islamic Banks

### 2.1 Factor Analysis for Islamic Banks (Expectation)

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.968
Bartlett's Test of Sphericity	Approx. Chi-Square	12406.783
	df	406
	Sig.	.000

<b>Communalities</b>		
	<b>Initial</b>	<b>Extraction</b>
Modern equipment	1.000	.494
Interior design	1.000	.743
On time	1.000	.748
Prompt service	1.000	.753
Error-free record	1.000	.666
Brochures	1.000	.689

Neat-appearing	1.000	.658
Advertised promises	1.000	.754
Accurate	1.000	.773
Promptly solved	1.000	.802
Are told when service will be	1.000	.721
Willing to help	1.000	.737
never too busy to respond	1.000	.674
Personal attention	1.000	.664
Understand the need	1.000	.689
Courteous	1.000	.711
Have the knowledge	1.000	.755
Instill confidence	1.000	.727
Customers feel safe	1.000	.672
Individual attention	1.000	.681
Have customer's best interest	1.000	.722
Operating hours	1.000	.672
Banking Services accord. <i>Shari'ah</i>	1.000	.669
<i>Shari'ah</i> Advisory Board	1.000	.675
Neither pays nor takes interest	1.000	.690
Profit sharing investment acc.	1.000	.689
Socially responsible	1.000	.728
Product & services are competitive	1.000	.734
Knowledge on Islamic banking	1.000	.753
Extraction Method: Principal Component Analysis.		

Item	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	16.226	55.952	55.952	16.226	55.952	55.952	7.956	27.435	27.435
2	1.814	6.257	62.209	1.814	6.257	62.209	5.390	18.587	46.022
3	1.345	4.637	66.845	1.345	4.637	66.845	5.272	18.180	64.202
4	1.058	3.650	70.495	1.058	3.650	70.495	1.825	6.294	70.495
5	.788	2.719	73.214						
6	.642	2.215	75.429						
7	.638	2.201	77.630						
8	.581	2.004	79.635						
9	.509	1.757	81.391						
10	.455	1.567	82.959						
11	.423	1.460	84.419						
12	.410	1.415	85.834						
13	.391	1.347	87.182						
14	.338	1.167	88.349						
15	.324	1.118	89.467						
16	.313	1.078	90.546						
17	.310	1.068	91.614						
18	.283	.975	92.589						
19	.263	.909	93.498						
20	.243	.839	94.337						
21	.232	.801	95.137						

22	.217	.749	95.887						
23	.213	.735	96.621						
24	.190	.655	97.276						
25	.176	.607	97.883						
26	.172	.592	98.475						
27	.166	.571	99.046						
28	.144	.496	99.542						
29	.133	.458	100.000						
Extraction Method: Principal Component Analysis.									

Rotated Component Matrix <sup>a</sup>				
	Component			
	1	2	3	4
Promptly solved	.802	.302		
Accurate	.786	.338		
Prompt service	.779			
Advertised promises	.771	.311		
On time	.766			
Error-free record	.726			
Willing to help	.719		.329	
Brochures	.713	.302		
Are told when service will be	.712		.327	
Never too busy to respond	.660		.392	
Modern equipment	.535			.310
<i>Shari'ah</i> Advisory Board		.743		
Banking Services accord. <i>Shari'ah</i>		.729		
Neither pays nor takes interest	.352	.725		
Profit sharing investment acc.		.697	.339	
Product & services are competitive	.307	.684	.377	
Socially responsible		.683	.361	
Knowledge on Islamic banking	.446	.644	.373	
Personal attention			.703	.334
Individual attention			.698	.355
Understand the need	.353		.680	
Have customer's best interest	.325	.385	.670	
Courteous	.404	.317	.668	
Have the knowledge	.441	.330	.658	
Instill confidence	.435	.390	.621	
Operating hours		.451	.594	
Customers feel safe	.476	.452	.488	
Interior design				.807
Neat-appearing	.483			.601
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 7 iterations.				

## 2.2 Factor Analysis for the Islamic Banks (Perception)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.977
Bartlett's Test of Sphericity	Approx. Chi-Square	14727.103
	df	406



	Sig.	.000
--	------	------

Communalities		
	Initial	Extraction
Modern equipment	1.000	.502
Interior design	1.000	.380
On time	1.000	.709
Brochures	1.000	.695
Advertised promises	1.000	.742
Accurate	1.000	.673
Promptly solved	1.000	.764
Neat-appearing	1.000	.562
Error-free record	1.000	.638
Prompt service	1.000	.752
Are told when service will be	1.000	.772
Willing to help	1.000	.728
Never too busy to respond	1.000	.752
Personal attention	1.000	.675
Understand the need	1.000	.761
Courteous	1.000	.695
Have the knowledge	1.000	.727
Instill confidence	1.000	.754
Customers feel safe	1.000	.728
Individual attention	1.000	.671
Have customer's best interest	1.000	.751
Operating hours	1.000	.550
Banking Services accord. <i>Shari'ah</i>	1.000	.734
<i>Shari'ah</i> Advisory Board	1.000	.713
Neither pays nor takes interest	1.000	.716
Profit sharing investment acc.	1.000	.755
Socially responsible	1.000	.801
Product & services are competitive	1.000	.736
Knowledge on Islamic banking	1.000	.730
Extraction Method: Principal Component Analysis.		

Total Variance Explained									
Item	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	18.558	63.994	63.994	18.558	63.994	63.994	12.596	43.434	43.434
2	1.607	5.540	69.534	1.607	5.540	69.534	7.569	26.099	69.534
3	.899	3.102	72.635						
4	.806	2.779	75.414						
5	.597	2.058	77.472						
6	.553	1.907	79.379						
7	.507	1.748	81.128						
8	.482	1.661	82.789						
9	.427	1.474	84.263						
10	.402	1.386	85.649						
11	.361	1.243	86.892						
12	.323	1.114	88.007						
13	.288	.995	89.001						

14	.282	.974	89.975						
15	.281	.970	90.945						
16	.261	.898	91.843						
17	.253	.874	92.717						
18	.230	.792	93.509						
19	.224	.771	94.281						
20	.212	.733	95.013						
21	.198	.684	95.697						
22	.192	.664	96.361						
23	.188	.647	97.008						
24	.172	.592	97.600						
25	.167	.577	98.177						
26	.148	.511	98.688						
27	.141	.485	99.173						
28	.127	.438	99.611						
29	.113	.389	100.000						
Extraction Method: Principal Component Analysis.									

### 3. Factor Analysis for the Conventional Banks

#### 3.1 Factor Analysis for the Conventional Banks (Expectation)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.955
Bartlett's Test of Sphericity	Approx. Chi-Square	6786.258
	df	253
	Sig.	.000

Communalities		
	Initial	Extraction
Modern equipment	1.000	.562
Interior design	1.000	.712
On time	1.000	.557
Brochures	1.000	.662
Advertised promises	1.000	.631
Accurate	1.000	.673
Promptly solved	1.000	.648
Neat-appearing	1.000	.637
Error-free record	1.000	.572
Prompt service	1.000	.667
Are told when service will be	1.000	.579
Willing to help	1.000	.709
Never too busy to respond	1.000	.646
Personal attention	1.000	.568
Understand the need	1.000	.628
Courteous	1.000	.639
Have the knowlegde	1.000	.659
Instill confidence	1.000	.679
Customers feel safe	1.000	.577
Individual attention	1.000	.609
Have customer's best interest	1.000	.605

Operating hours	1.000	.519
Socially responsible	1.000	.550
Extraction Method: Principal Component Analysis.		

Total Variance Explained									
Item	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.329	49.257	49.257	11.329	49.257	49.257	6.048	26.295	26.295
2	1.576	6.853	56.110	1.576	6.853	56.110	5.954	25.886	52.181
3	1.385	6.021	62.131	1.385	6.021	62.131	2.289	9.950	62.131
4	.904	3.931	66.062						
5	.736	3.201	69.263						
6	.706	3.068	72.330						
7	.639	2.776	75.107						
8	.588	2.555	77.661						
9	.528	2.294	79.956						
10	.477	2.075	82.031						
11	.460	1.998	84.029						
12	.442	1.921	85.950						
13	.390	1.694	87.644						
14	.367	1.595	89.239						
15	.355	1.545	90.784						
16	.331	1.441	92.226						
17	.313	1.359	93.585						
18	.292	1.268	94.853						
19	.284	1.237	96.089						
20	.267	1.159	97.249						
21	.243	1.058	98.306						
22	.224	.972	99.279						
23	.166	.721	100.000						
Extraction Method: Principal Component Analysis.									

Rotated Component Matrix <sup>a</sup>			
	Component		
	1	2	3
Accurate	.773		
Promptly solved	.734	.322	
Advertised promises	.725		
Prompt service	.685	.445	
Brochures	.657		.449
On time	.642		.359
Modern equipment	.637		.316
Error-free record	.635	.409	
Willing to help	.632	.555	
Are told when service will be	.609	.407	
Never too busy to respond	.576	.558	
Instill confidence	.372	.726	
Understand the need	.316	.709	
Courteous	.343	.694	
Individual attention		.692	.358
Personal attention		.674	.335

Have the knowledge	.463	.667	
Customers feel safe	.379	.659	
Have customer's best interest	.427	.641	
Operating hours		.619	
Socially responsible		.547	.436
Interior design			.823
Neat-appearing	.304		.679
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 9 iterations.			

### 3.2 Factor Analysis for the Conventional Banks (Perception)

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.973
Bartlett's Test of Sphericity	Approx. Chi-Square	10063.479
	df	253
	Sig.	.000

<b>Communalities</b>		
	<b>Initial</b>	<b>Extraction</b>
Modern equipment	1.000	.583
Interior design	1.000	.366
Prompt service	1.000	.707
Never too busy to respond	1.000	.769
Willing to help	1.000	.773
Are told when service will be	1.000	.728
On time	1.000	.746
Brochures	1.000	.726
Error-free record	1.000	.553
Neat-appearing	1.000	.431
Advertised promises	1.000	.778
Accurate	1.000	.718
Promptly solved	1.000	.742
Personal attention	1.000	.754
Understand the need	1.000	.766
Courteous	1.000	.773
Have the knowledge	1.000	.725
Instill confidence	1.000	.744
Customers feel safe	1.000	.600
Individual attention	1.000	.742
Have customer's best interest	1.000	.770
Operating hours	1.000	.646
Socially responsible	1.000	.643
Extraction Method: Principal Component Analysis.		

<b>Total Variance Explained</b>									
Item	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.543	63.229	63.229	14.543	63.229	63.229	10.004	43.494	43.494
2	1.241	5.394	68.623	1.241	5.394	68.623	5.780	25.129	68.623
3	.867	3.768	72.391						
4	.668	2.904	75.295						
5	.623	2.708	78.003						
6	.570	2.478	80.481						
7	.516	2.245	82.726						
8	.430	1.870	84.596						
9	.394	1.712	86.309						
10	.374	1.626	87.935						
11	.305	1.324	89.259						
12	.289	1.255	90.514						
13	.276	1.200	91.714						
14	.258	1.122	92.836						
15	.248	1.079	93.915						
16	.230	1.002	94.917						
17	.205	.892	95.808						
18	.195	.846	96.654						
19	.175	.760	97.414						
20	.157	.684	98.099						
21	.154	.669	98.767						
22	.147	.641	99.409						
23	.136	.591	100.000						
Extraction Method: Principal Component Analysis.									

<b>Rotated Component Matrix<sup>a</sup></b>		
	<b>Component</b>	
	<b>1</b>	<b>2</b>
Personal attention	.828	
Individual attention	.819	
Courteous	.810	.342
Have customer's best interest	.809	.341
Understand the need	.803	.347
Instill confidence	.790	.345
Never too busy to respond	.786	.389
Willing to help	.766	.432
Have the knowledge	.753	.397
Are told when service will be	.725	.451
Customers feel safe	.707	.316
Operating hours	.690	.413
Prompt service	.687	.484
Socially responsible	.686	.415
Error-free record	.612	.422
Neat-appearing	.537	.379
Modern equipment		.754
On time	.422	.754
Advertised promises	.489	.734
Accurate	.443	.722
Brochures	.461	.717
Promptly solved	.534	.676

Interior design		.550
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		